

STOKES



Arithmetic in My World

1

Arithmetic

IN MY WORLD

by

C. Newton Stokes
Belle Adams
Mary B. Bauer

1



Illustrated by Herbert Townsend



1958

ALLYN AND BACON, INC.

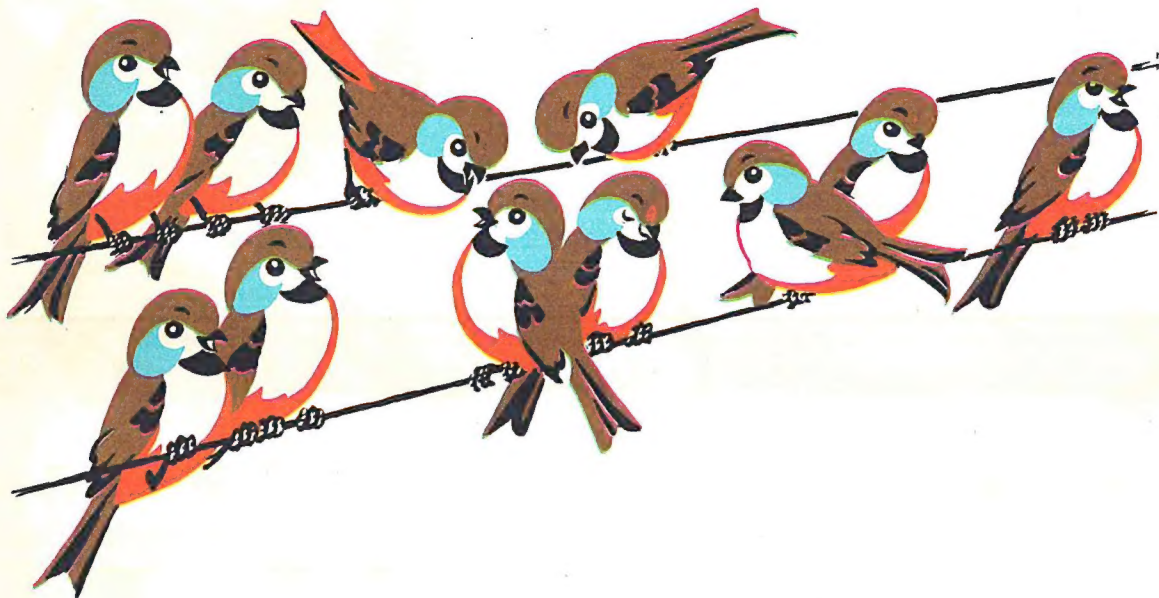
Boston New York Chicago Atlanta Dallas San Francisco



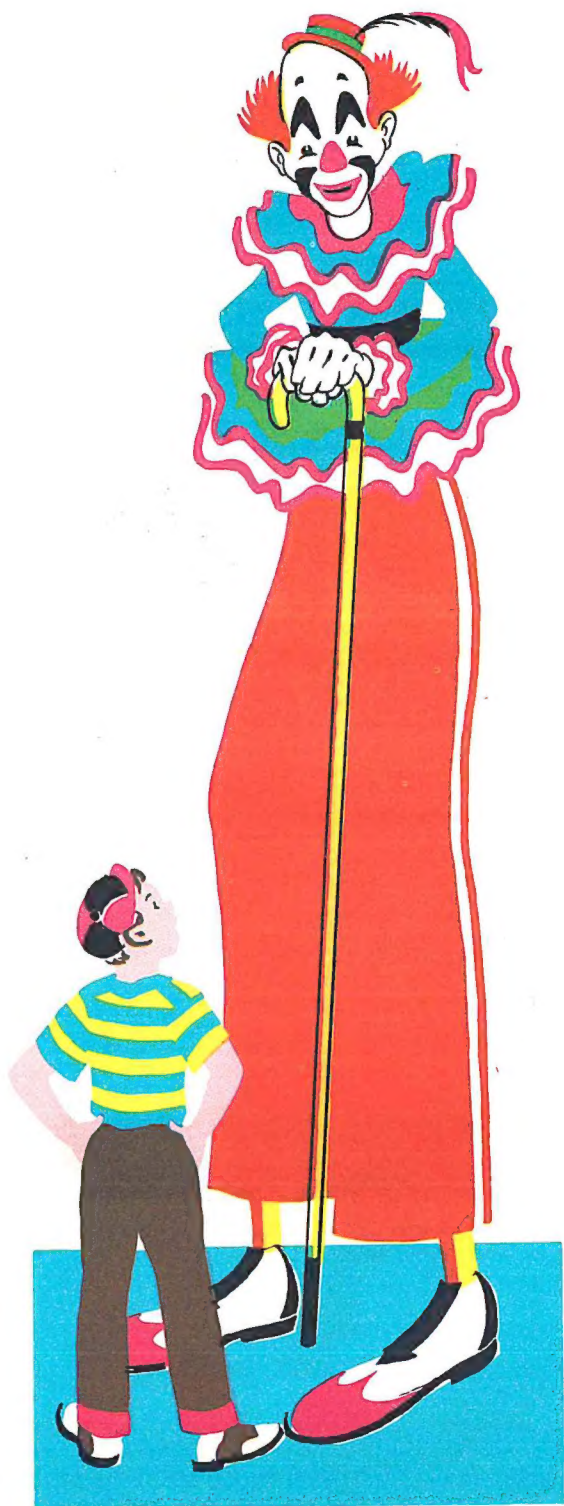
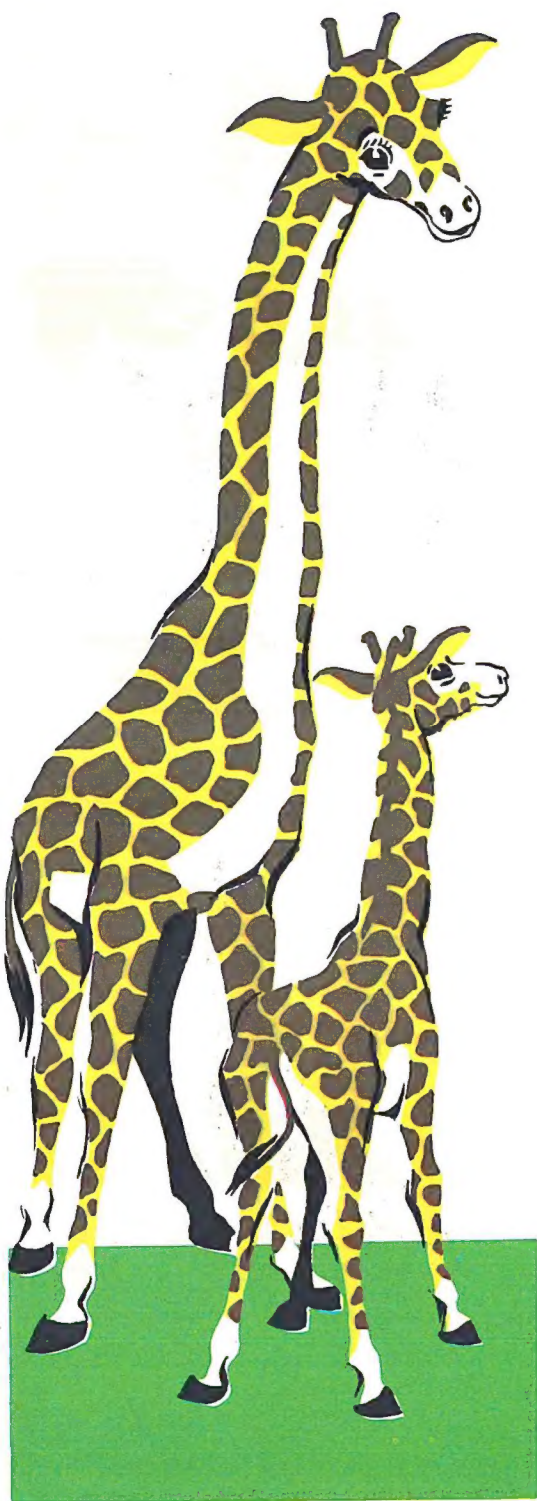
Things We See Around Us











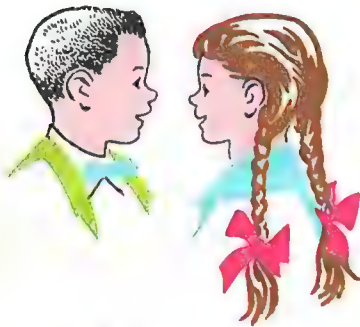












We Go to School



Two





two

Two



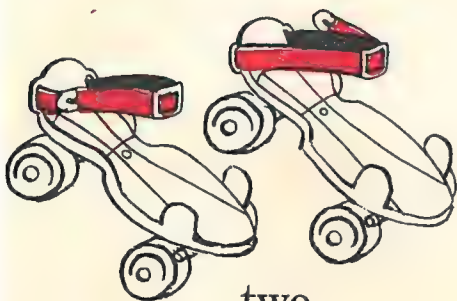
two



two



two

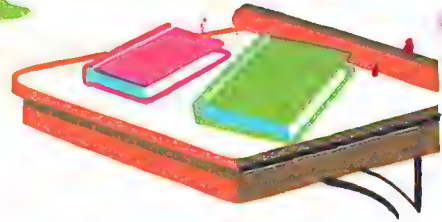
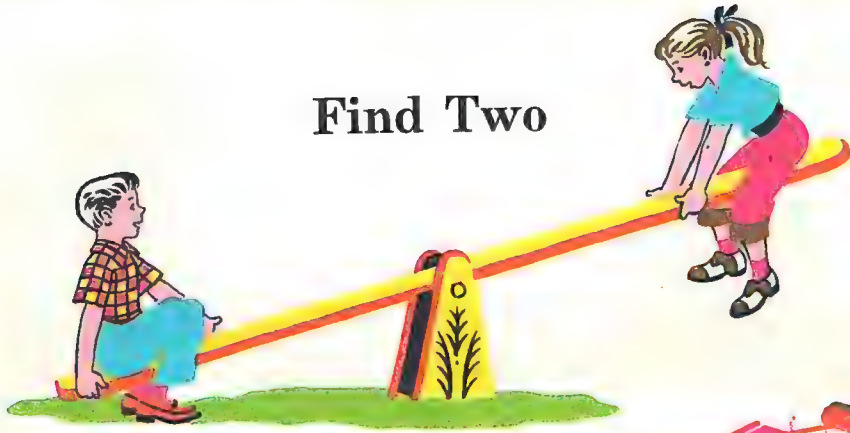


two



two

Find Two



Three





three

Three



three



three



three



three

Find Three



Four



Find Four

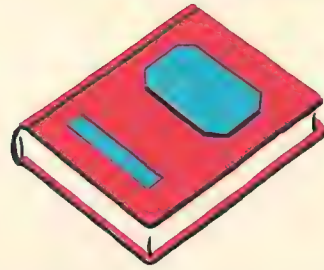


One





Find One



two

one

and

one

three



one

and

one

and

one

four



one

and

one

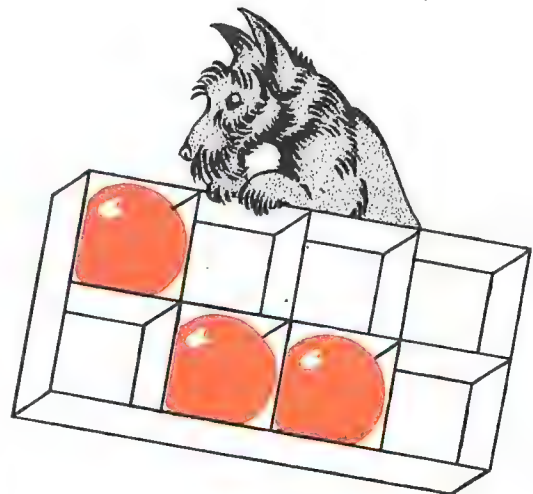
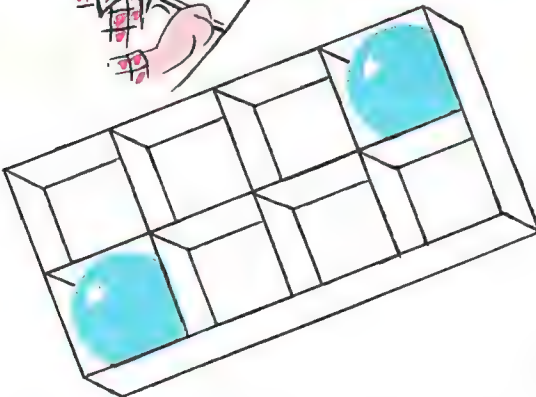
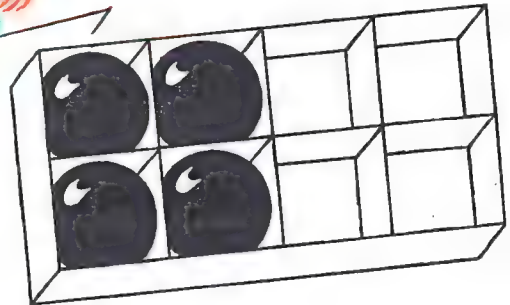
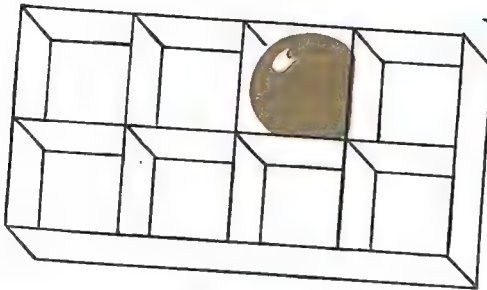
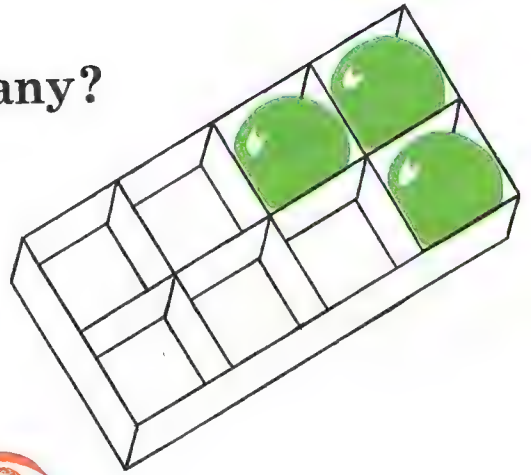
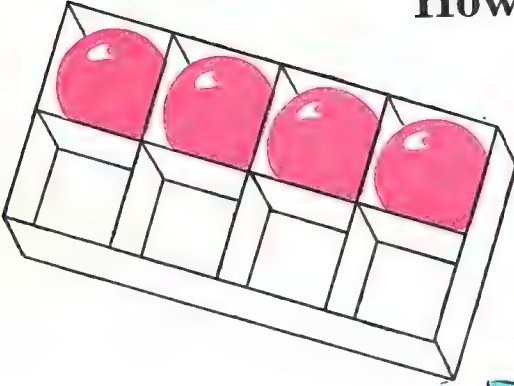
and

one

and

one

How Many?



We Take a Trip



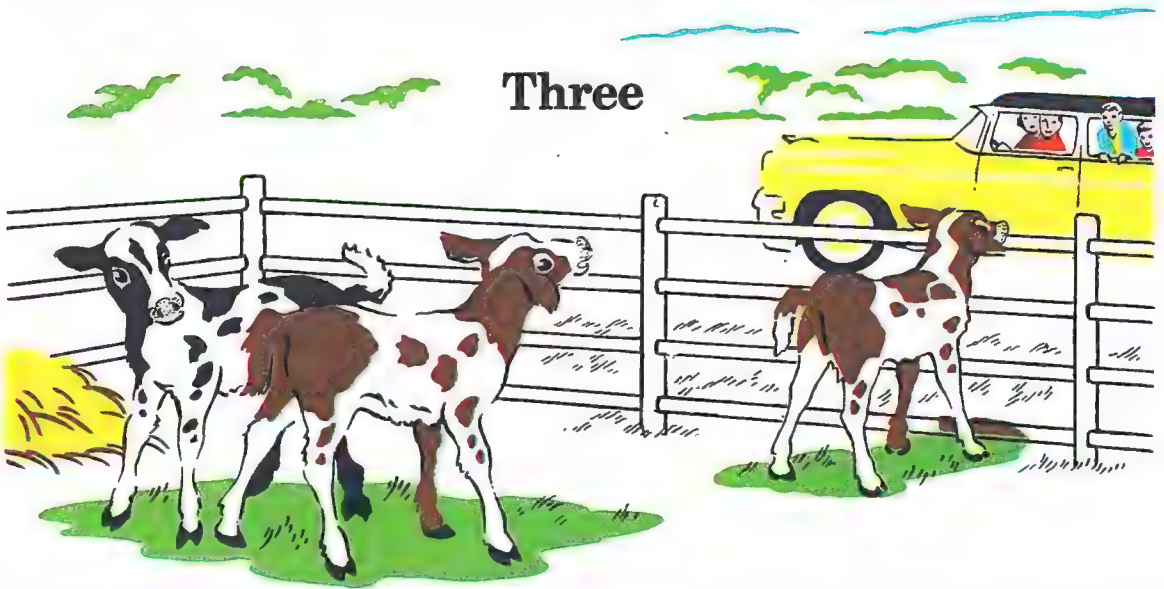
Two



one

one

Three



two

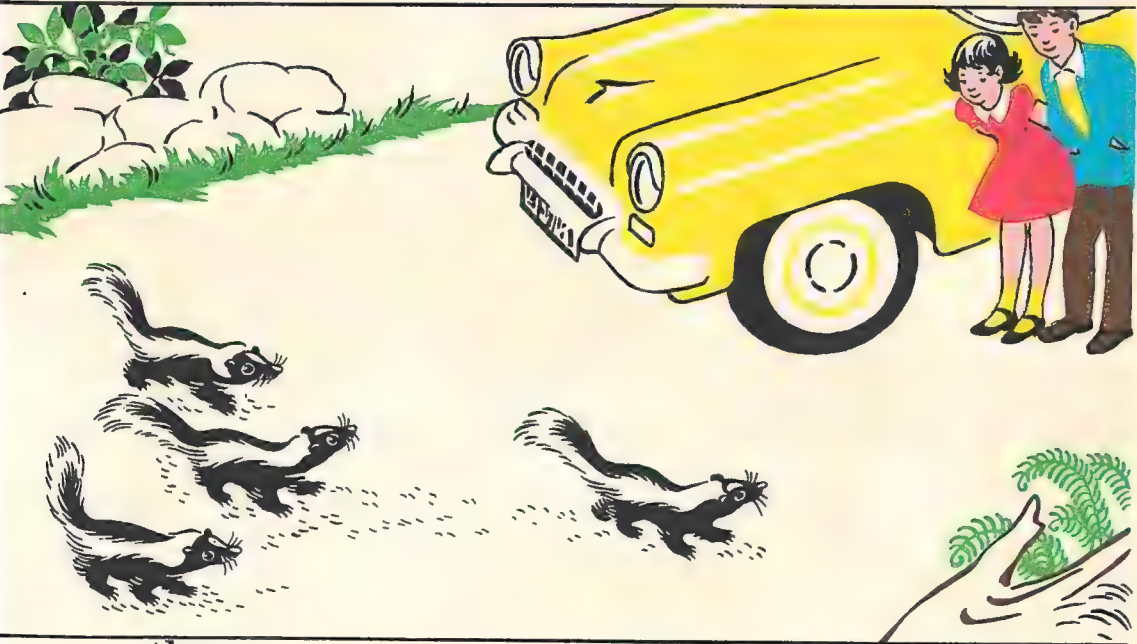
one

Four



two

two



three

one

Five

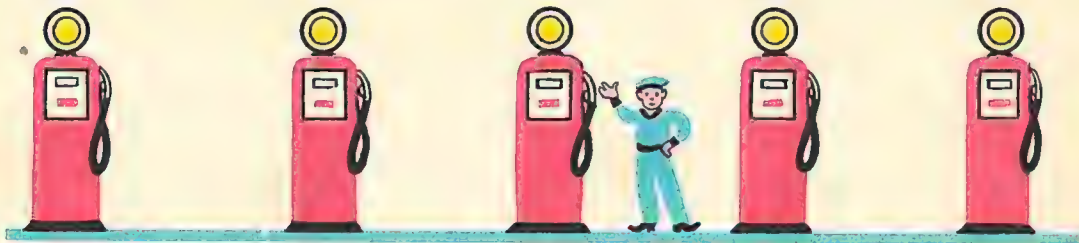


Find Five



four

one



one

one

one

one

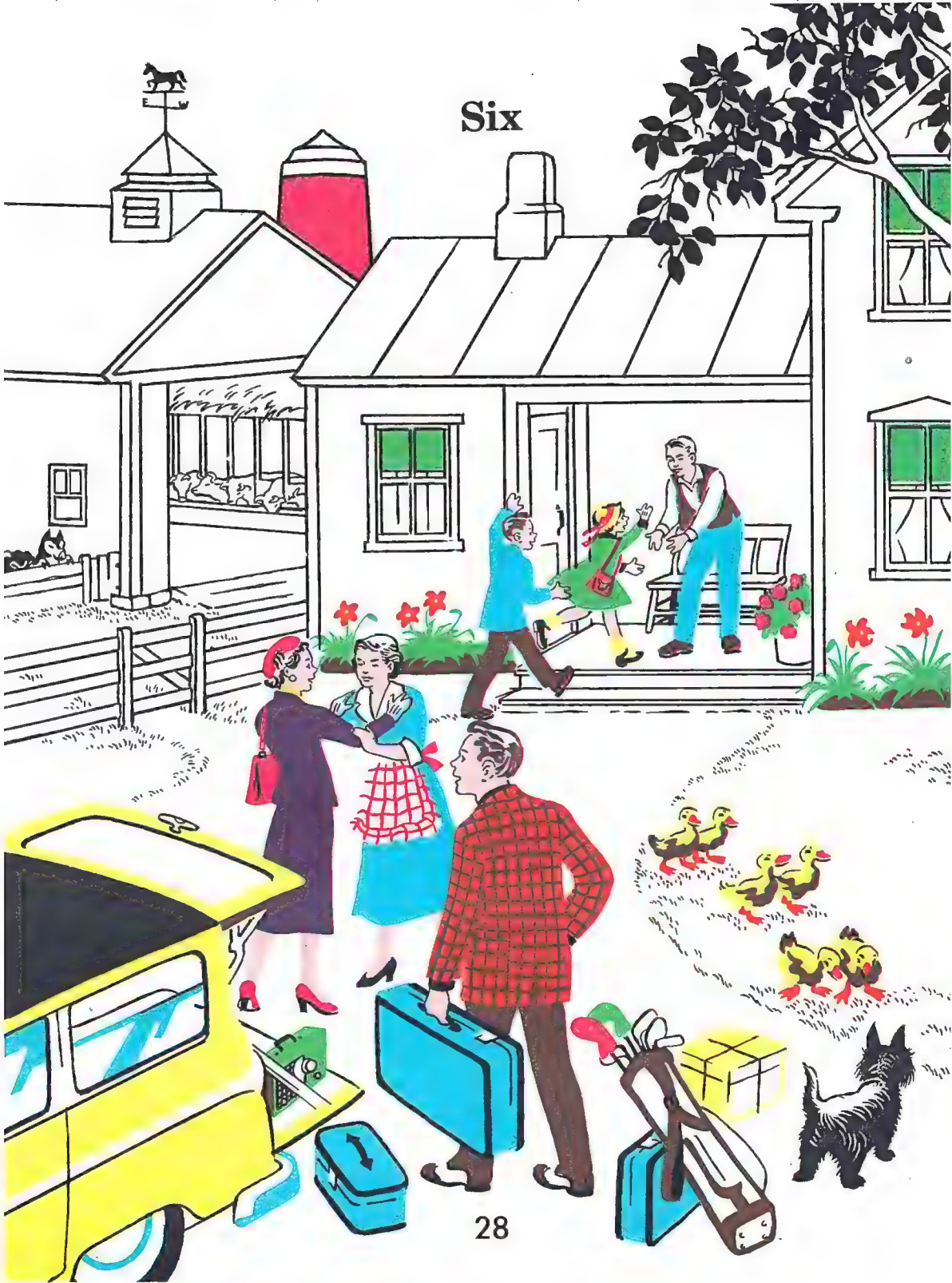
one

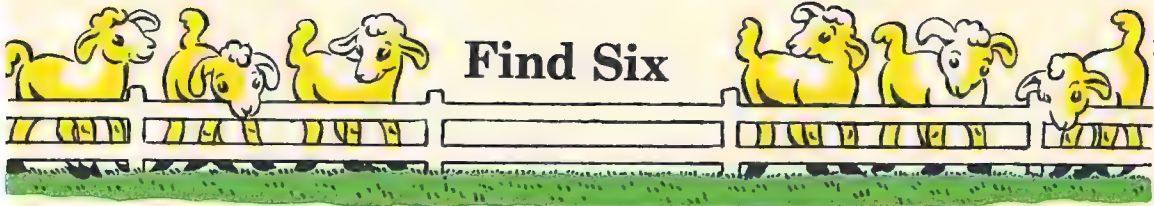


three

two

Six





Find Six

three

three



two

two

two

four

two



one

one

one

one

one

one



two

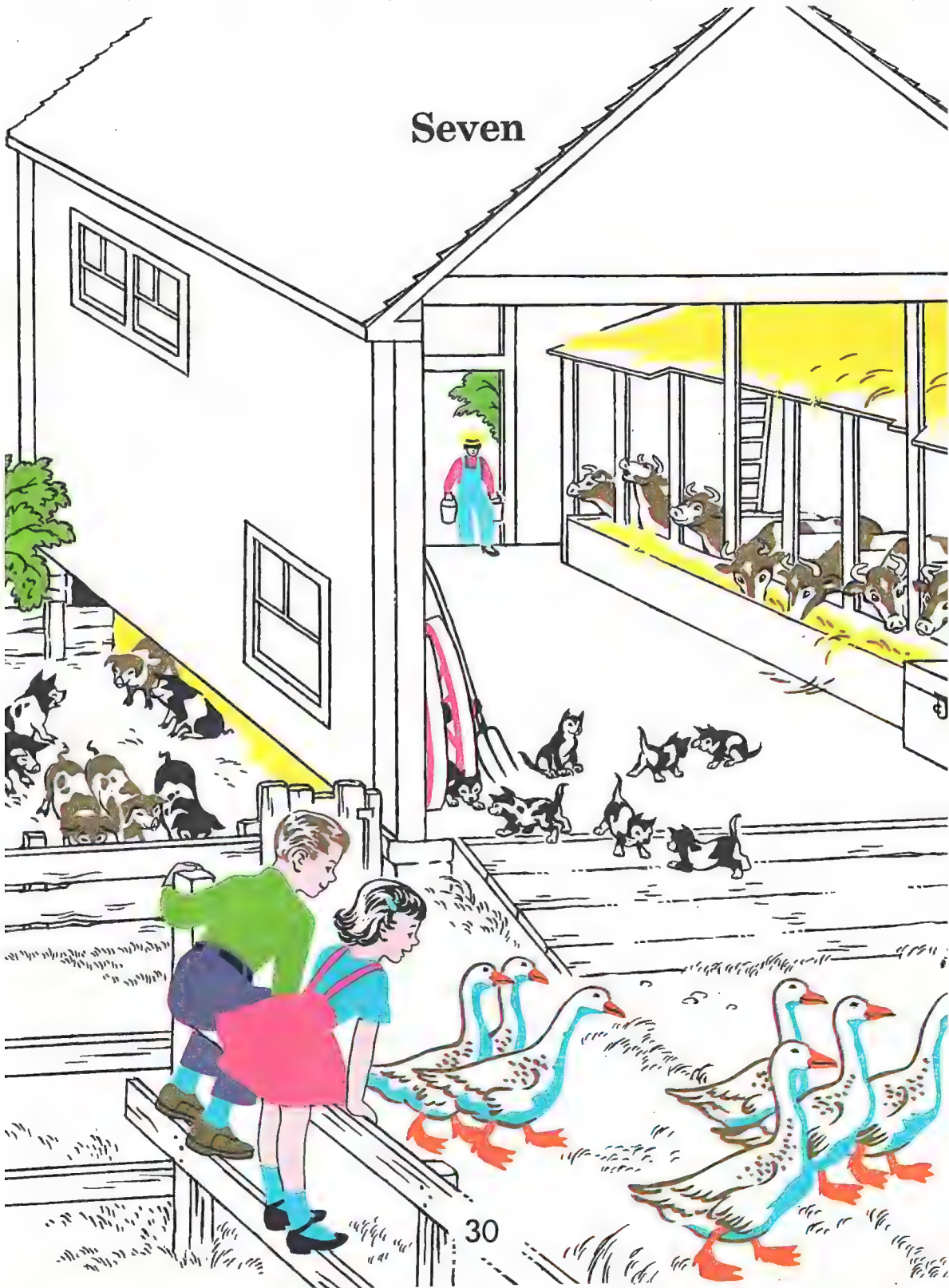
three

one

five

one

Seven



Find Seven



two

three

two

five

two



four



three



three



three



one

six

one



one

one

one

one

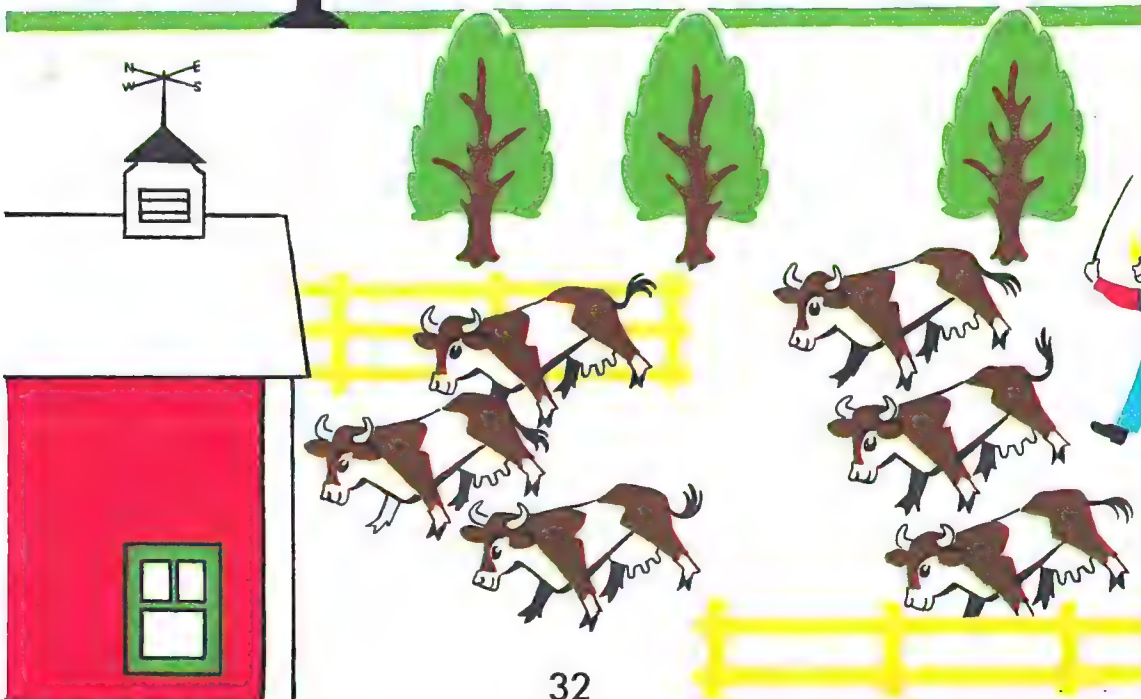
one

one

one



How Many?



Eight



Find Eight

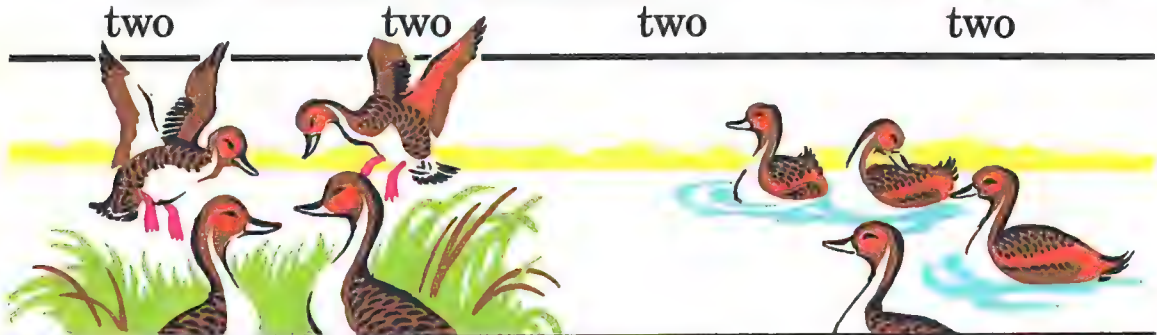


two

two

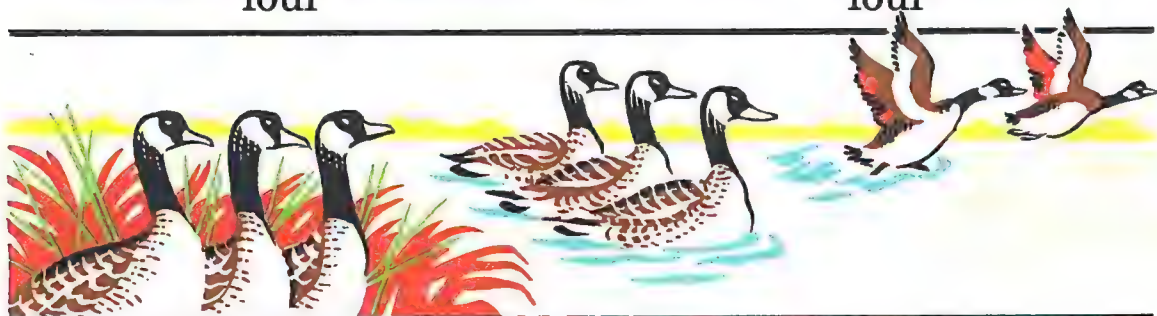
two

two



four

four



three

three

two

six

two

Find Eight



two

three

three

five

three



one

three

four

one

seven



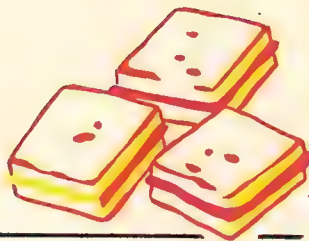
Find Nine



three



three

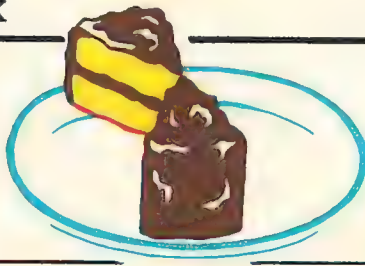


three

six



three



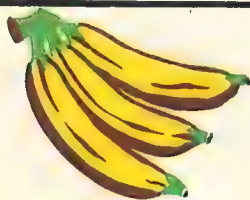
two



four

five

four



three



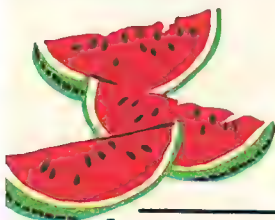
four



two

seven

two



three



five



one

eight

one



four

Find Nine



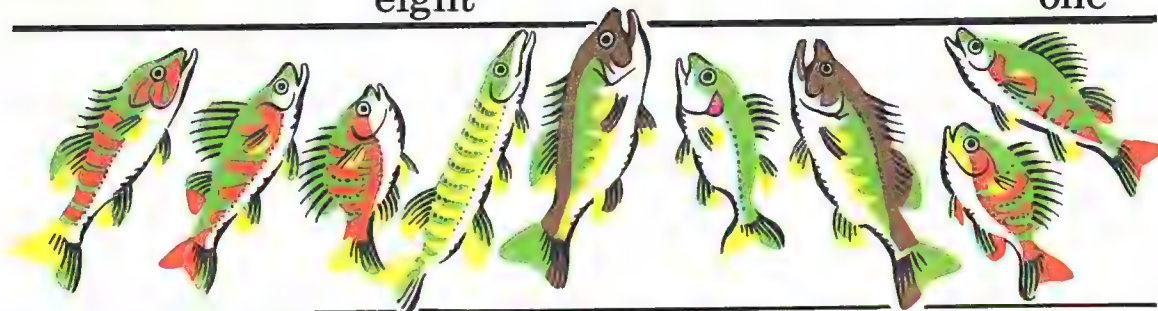
four



one

eight

one



one

one

one

one

one

one

one

one

one



four



three



two

seven

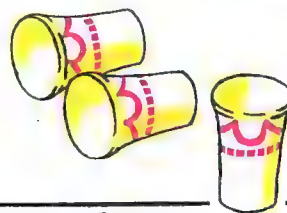
two



four



two



three

six

three

How Many?



two

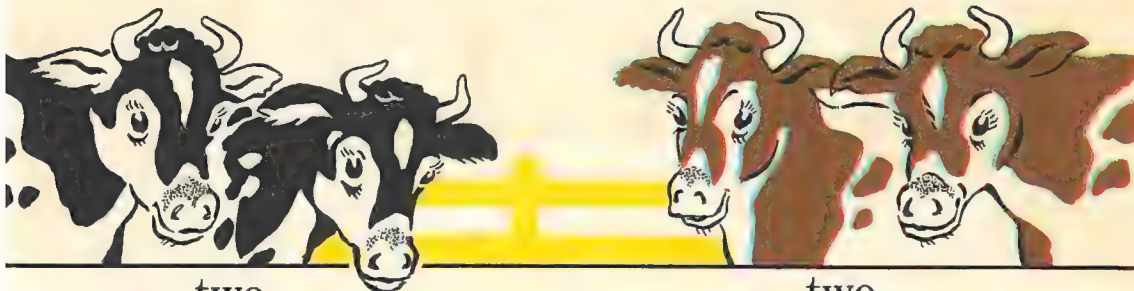
three

two



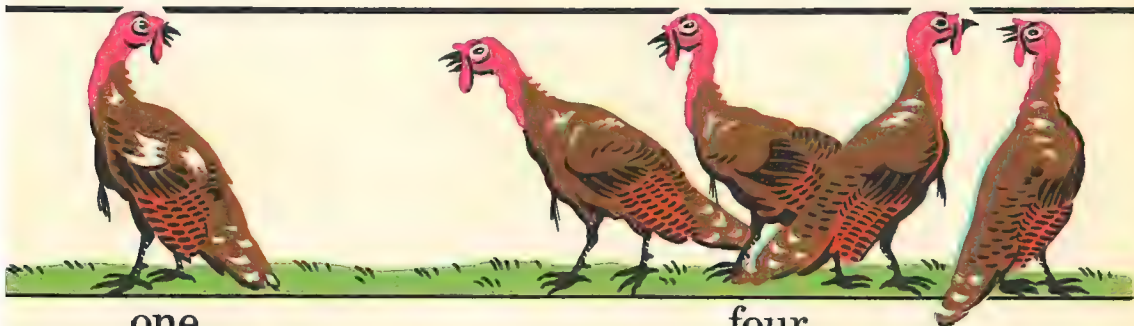
three

three



two

two



one

four



How Many?



two

one



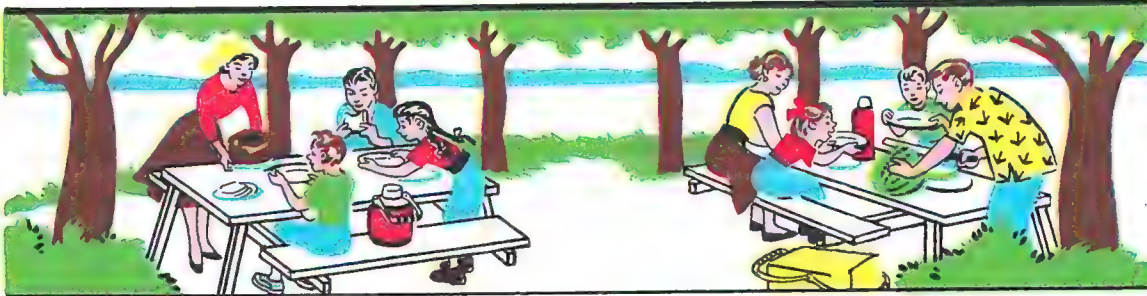
two



two



two



four

four

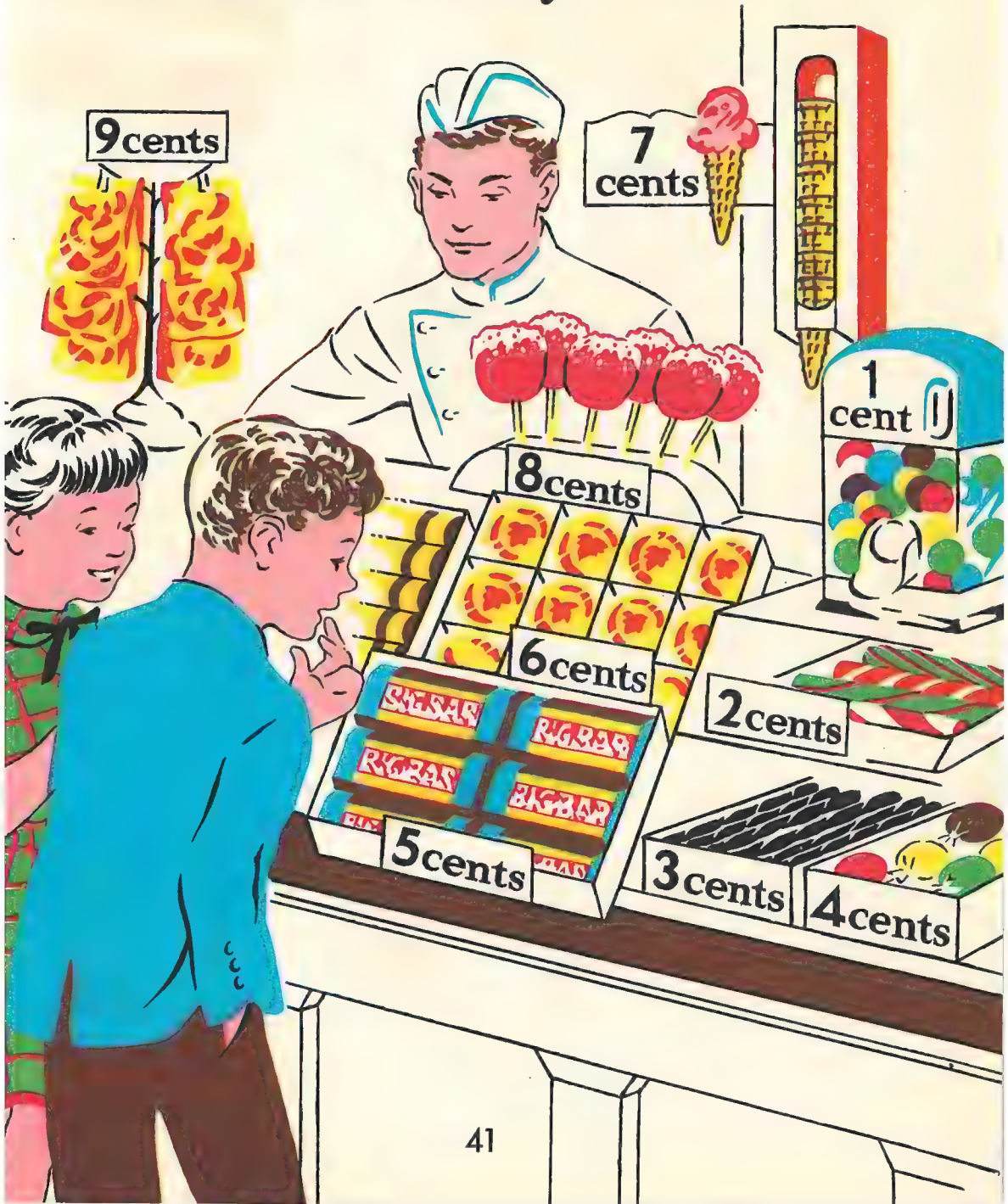


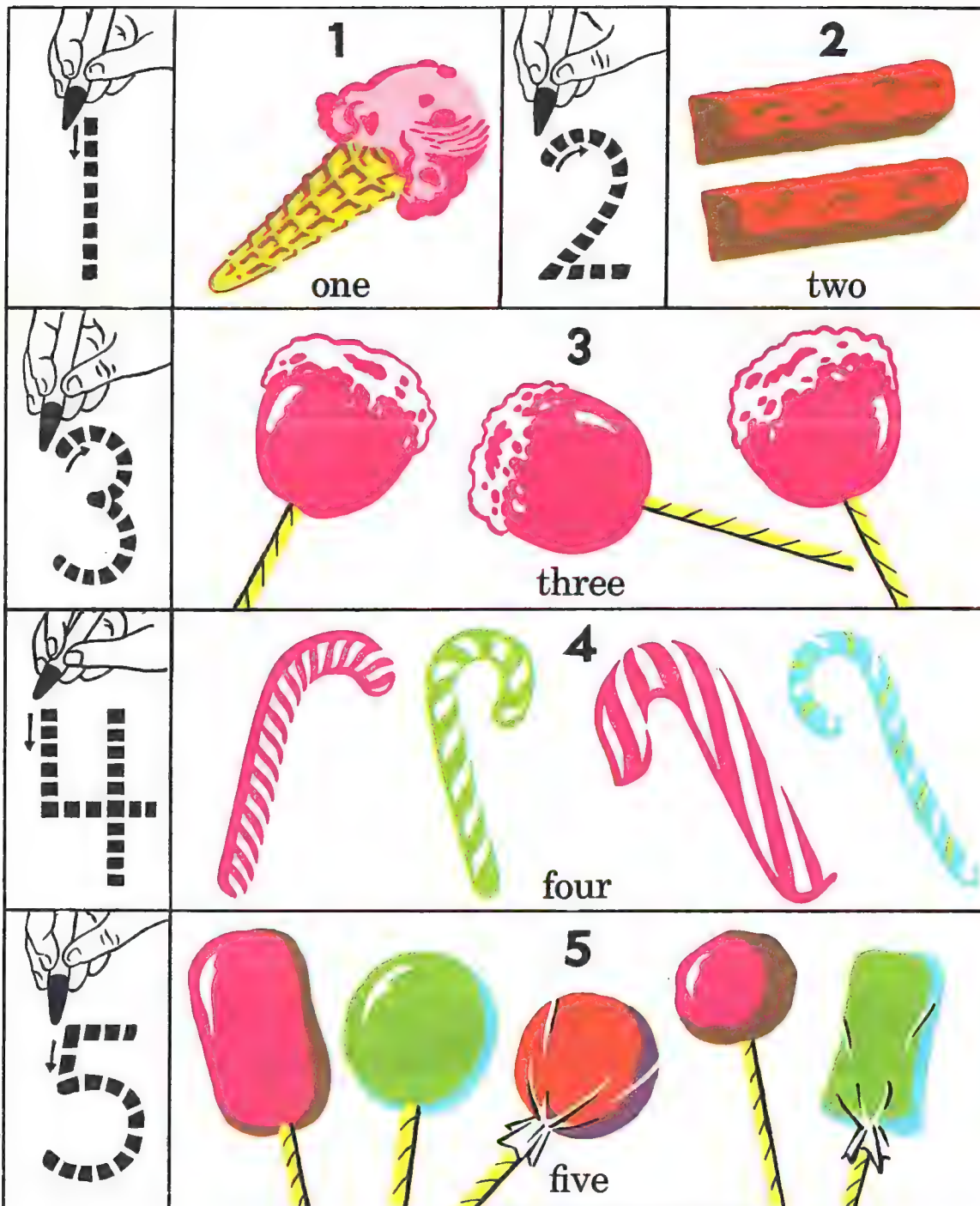
three

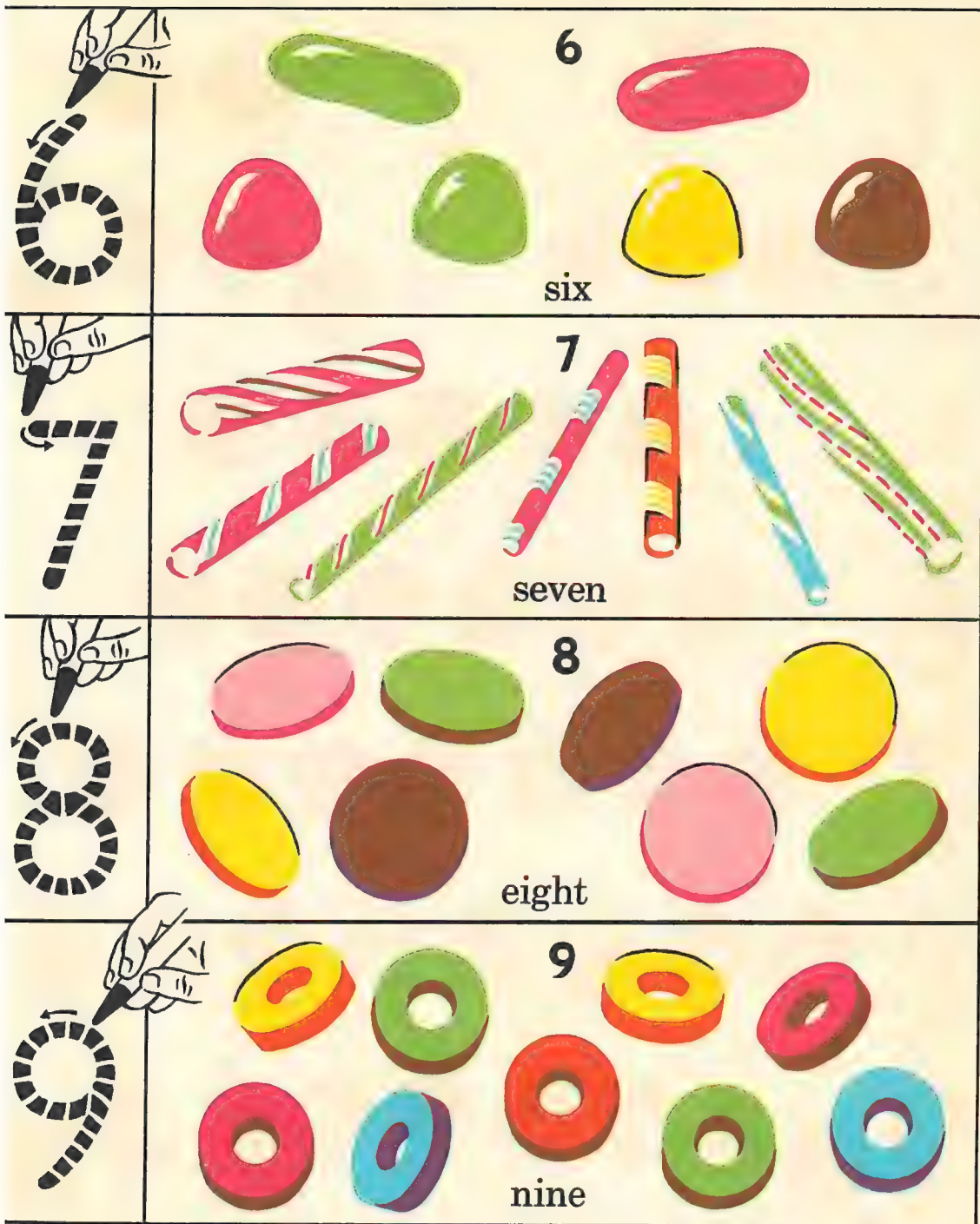
three










three

At the Candy Store



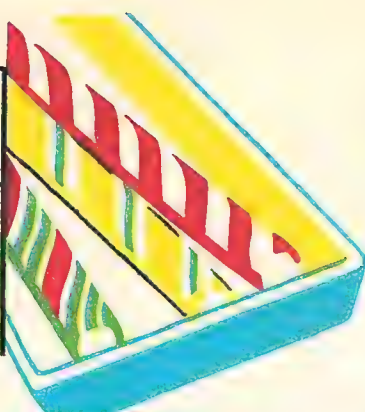




1	 one	2	 two
3	 three	4	 four
5	 five		
6	 six		
7	 seven		
8	 eight		
9	 nine		



1 cent



2 cents



3 cents



4 cents



5 cents



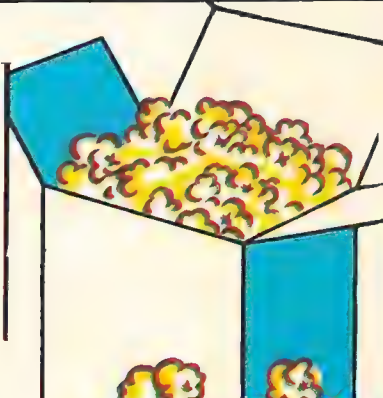
6 cents



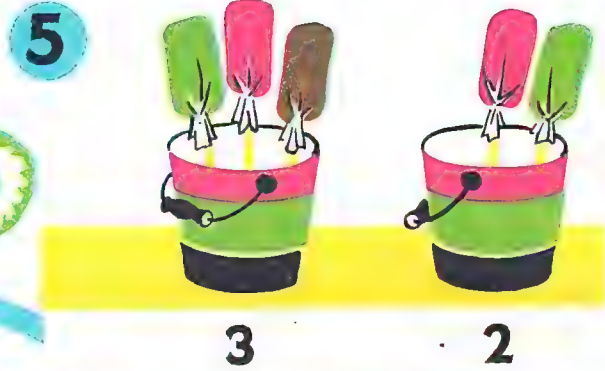
7 cents



8 cents



9 cents



7



6

1

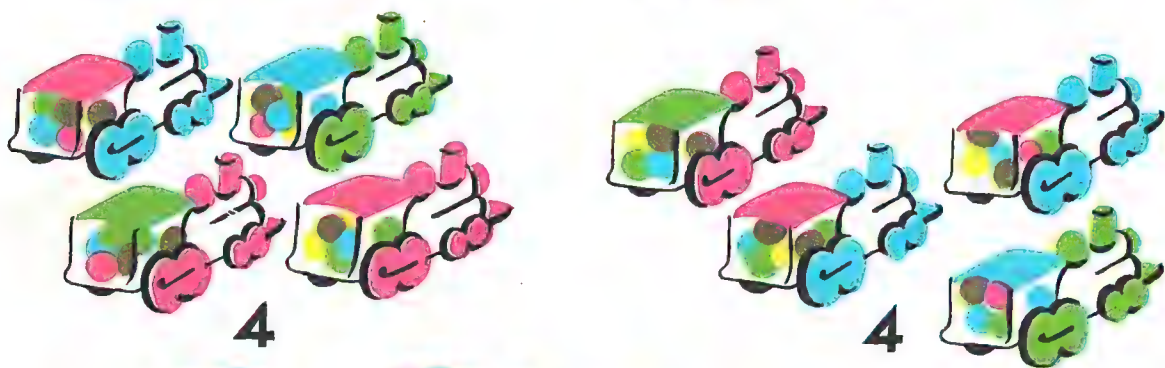
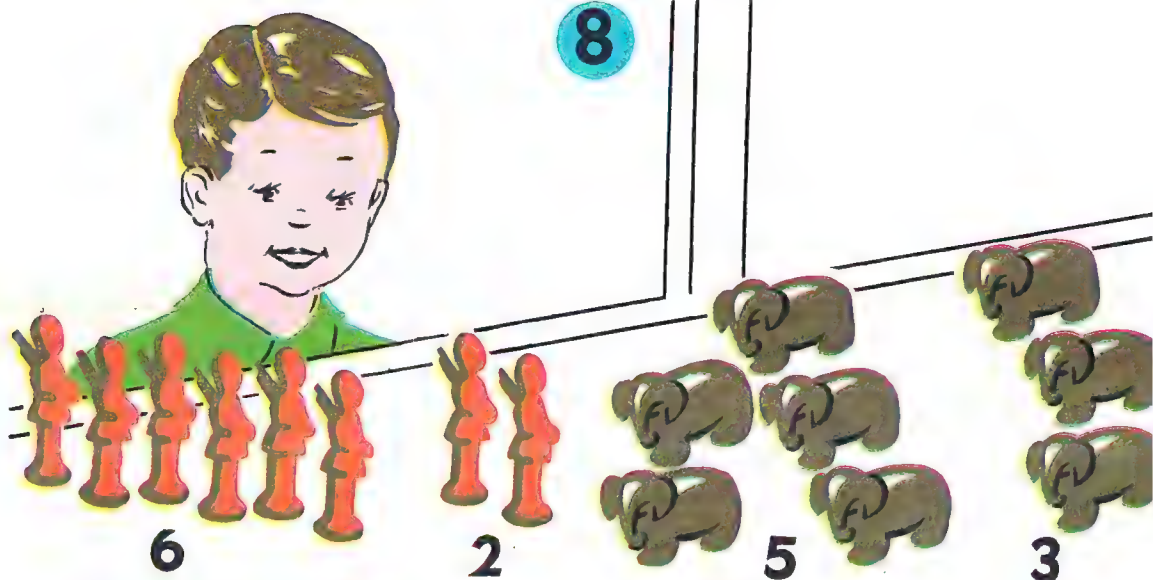
5

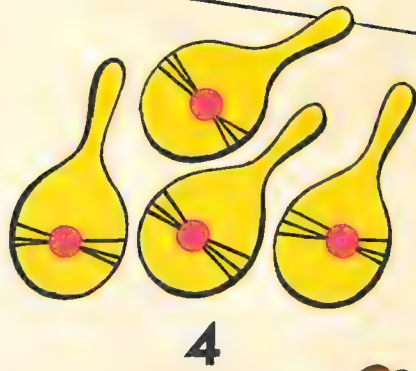
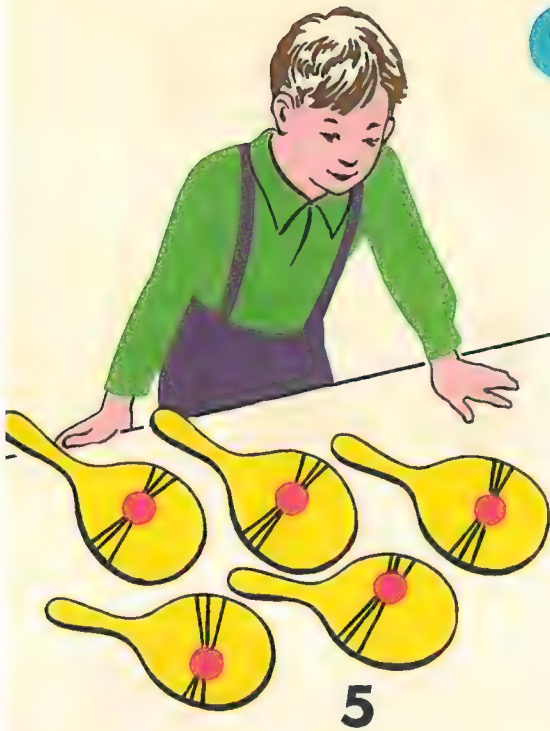
2

4

3

8







7

2



1

8



2-9-7



2-4-3-6

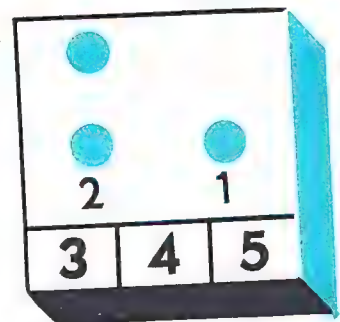
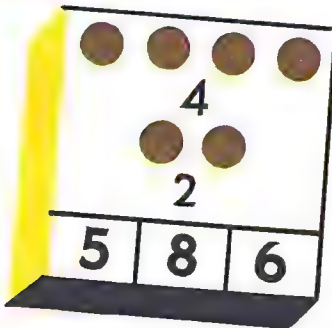
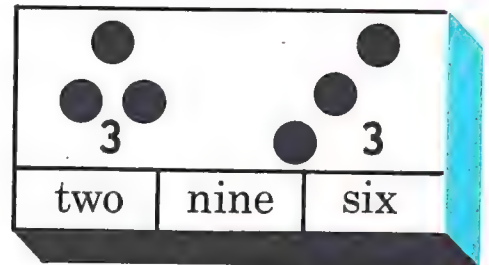
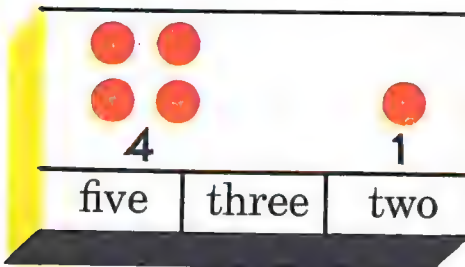
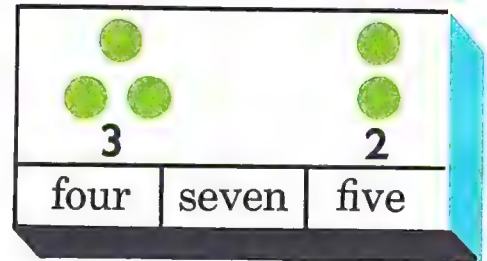
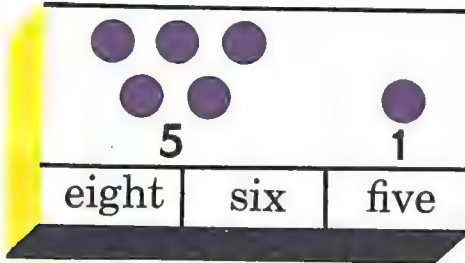
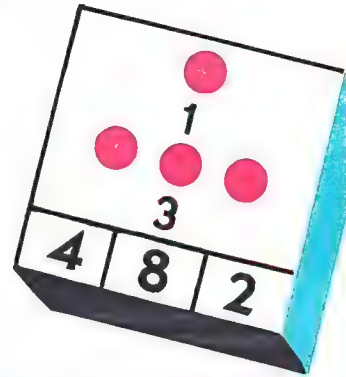
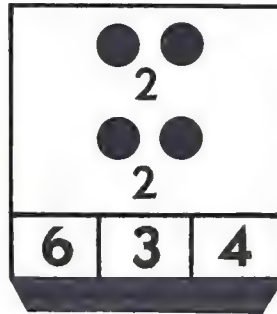
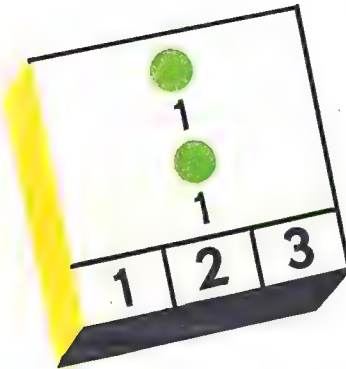


2-1-6-3

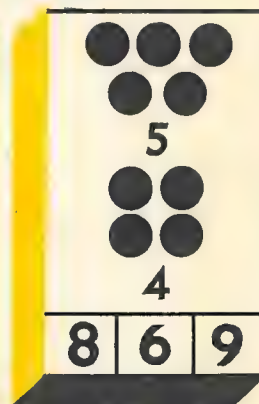
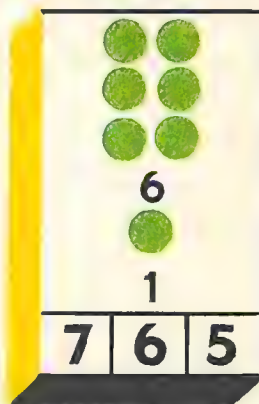
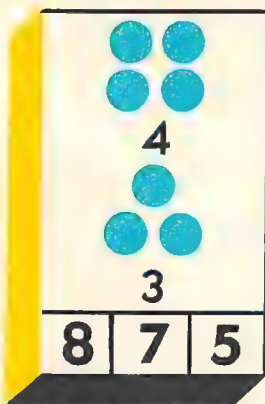
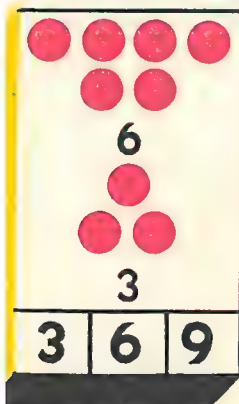
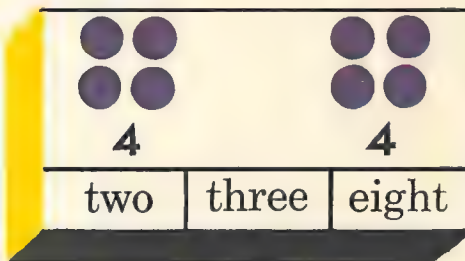
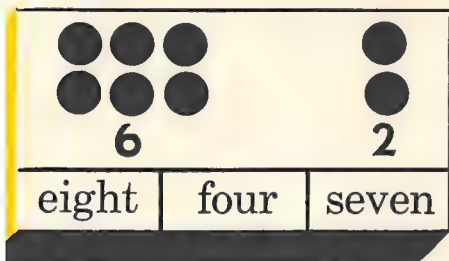
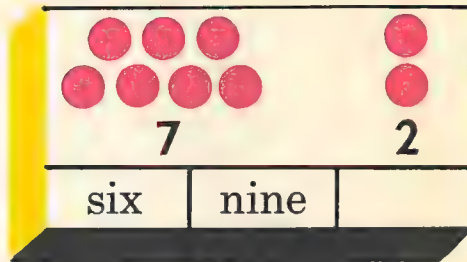
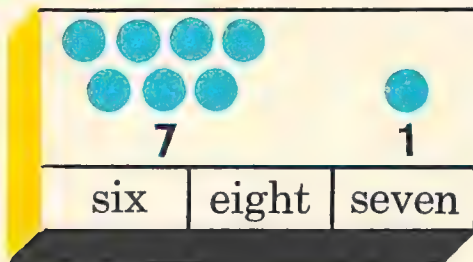
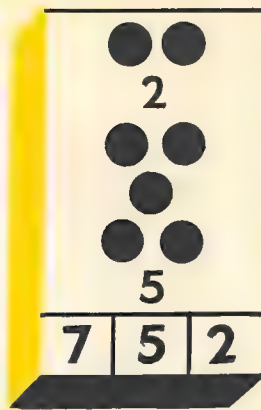
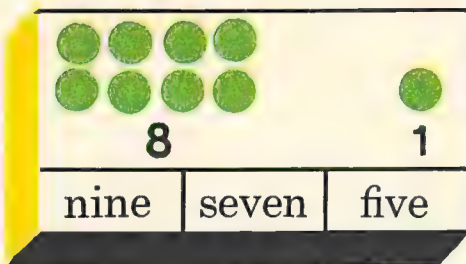
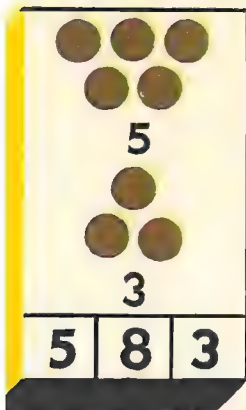


6-8

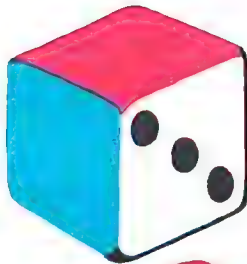
How Many in All?



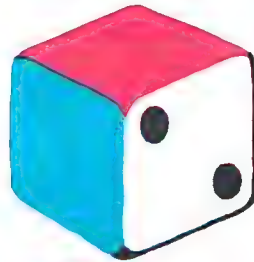
How Many?



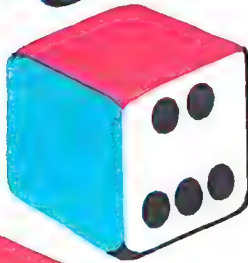
How Many Dots?



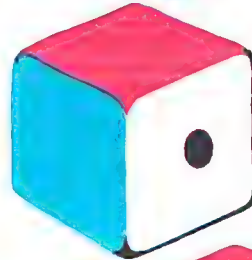
four
six
three



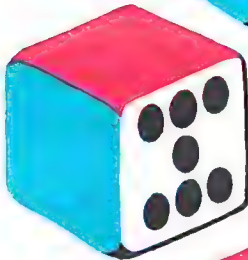
2
4
1



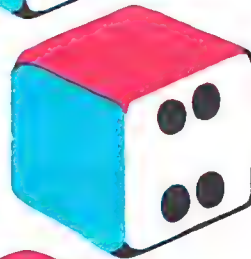
2
5
7



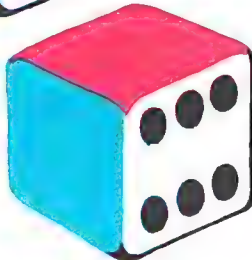
nine
one
three



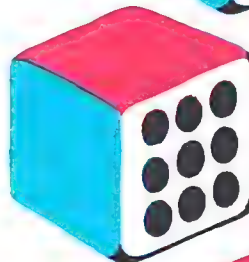
two
seven
nine



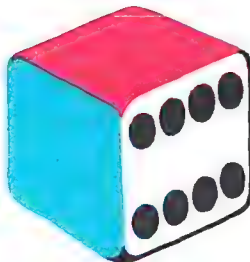
5
4
1



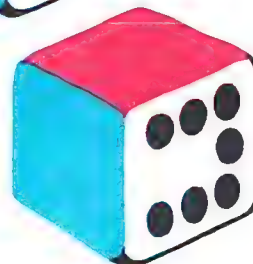
6
1
3



nine
seven
eight

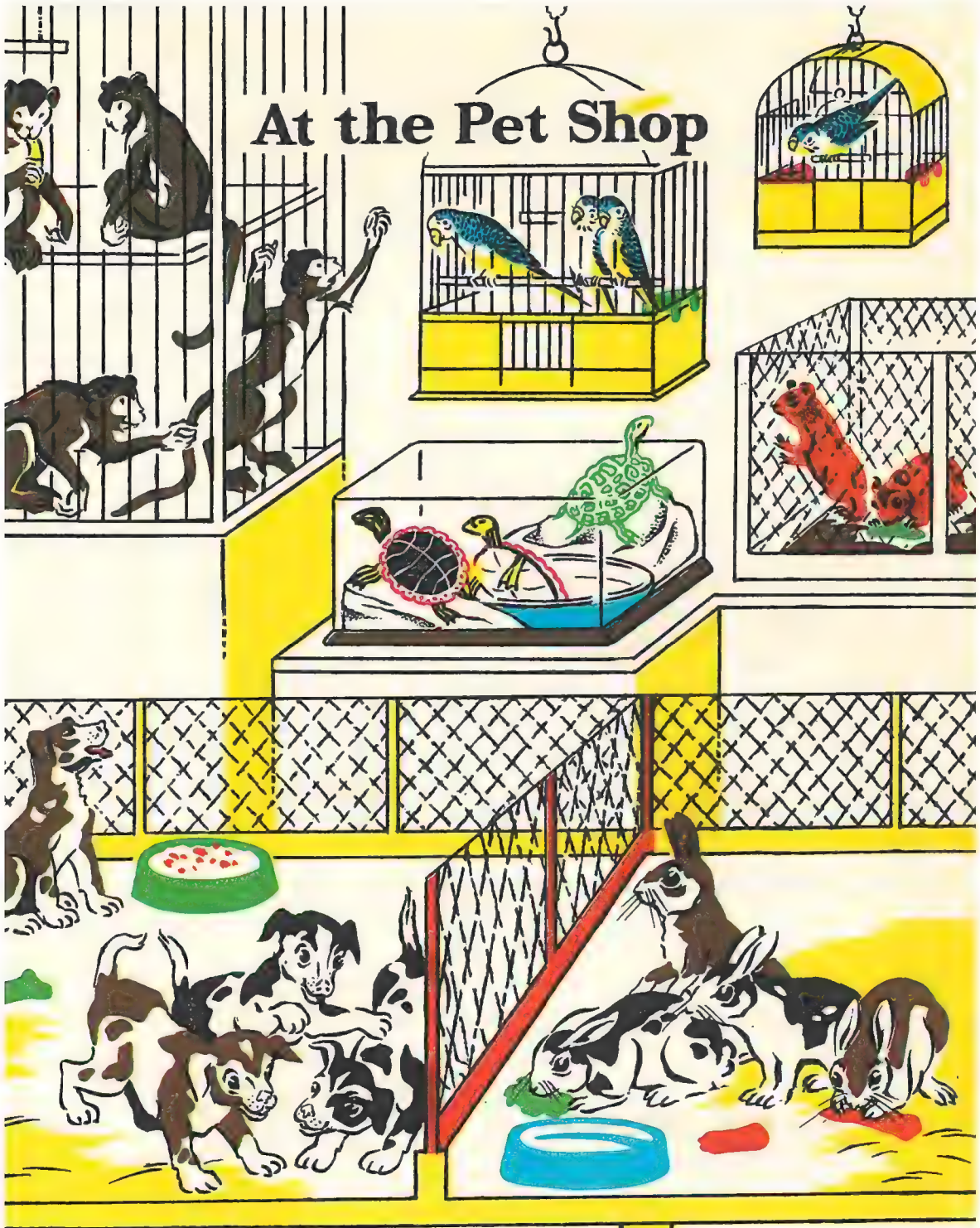


nine
one
eight



4
7
2

At the Pet Shop

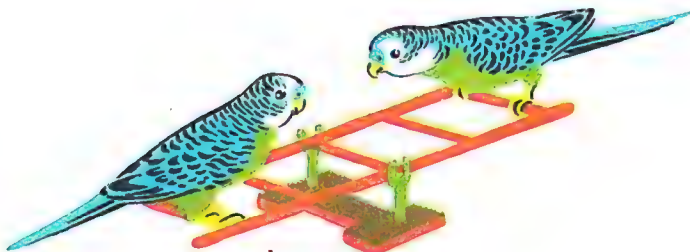




How Many Birds?

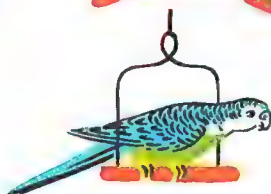
One bird and one bird are two birds.

$$1 + 1 = 2$$



1 bird
and
1 bird
are
2 birds.

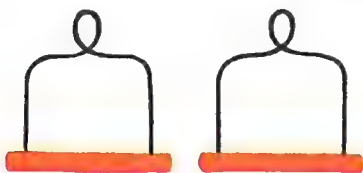
$$\begin{array}{r} 1 \\ + 1 \\ \hline 2 \end{array}$$



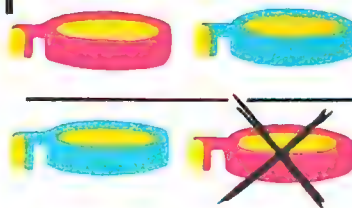
$$\begin{array}{r} 2 \\ - 1 \\ \hline 1 \end{array}$$

Two birds take away one bird
leaves one bird.

$$2 - 1 = 1$$



$$1 + 1 = ?$$



$$2 - 1 = ?$$

How Many Monkeys?

One monkey and one monkey
are how many monkeys?

How many monkeys are
a group of two monkeys?

Two 1's are how many?

Two 1's are 2.

$$2 \times 1 = 2$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline 2 \end{array}$$



Is there one group
of two monkeys?

How much is 1 group
of 2 things? One 2 is 2.

$$1 \times 2 = 2$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$$



$$1 + 1 = ?$$

$$2 \times 1 = ?$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$



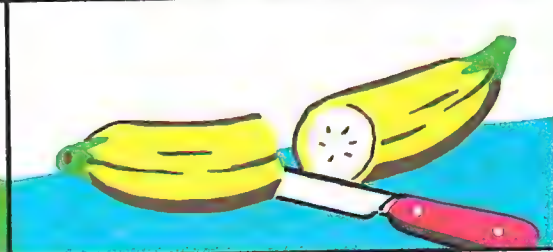
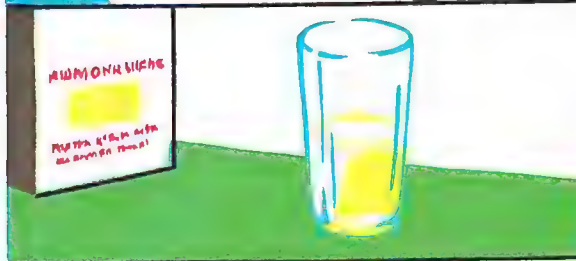
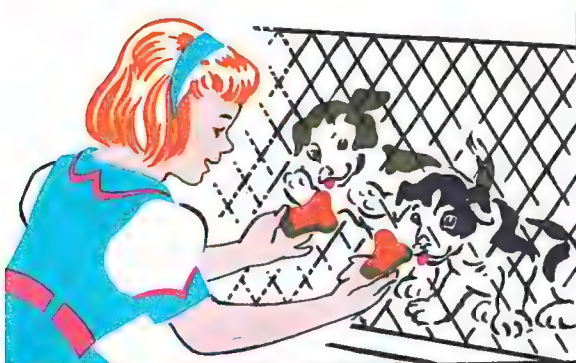
$$1 \times 2 = ?$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$



One

One-half



How Many?

How many fish do you see?

Do you see one and
one and one?

How many are 1 and
1 and 1?

$$\begin{array}{r} 1 \\ 1 \\ + 1 \\ \hline 3 \end{array}$$

$$1 + 1 + 1 = 3$$



Do you see three fish?

Do you see two fish?

How many are two fish
and one fish?

$$\begin{array}{r} 2 \\ + 1 \\ \hline 3 \end{array}$$

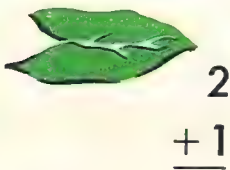
$$2 + 1 = 3$$



How many are one fish
and two fish?

$1 + 2 = 3$

$$\begin{array}{r} 1 \\ + 2 \\ \hline 3 \end{array}$$



$$2 + 1 = ?$$



$$1 + 2 = ?$$



How Many?



There are three frogs.

One frog goes away.

How many frogs are left?

3 frogs take away 1 frog

3

leaves how many frogs?

- 1

$$3 - 1 = 2$$

2



Do you see three frogs?

Three frogs take away

two frogs leaves

3

how many frogs?

- 2

$$3 - 2 = 1$$

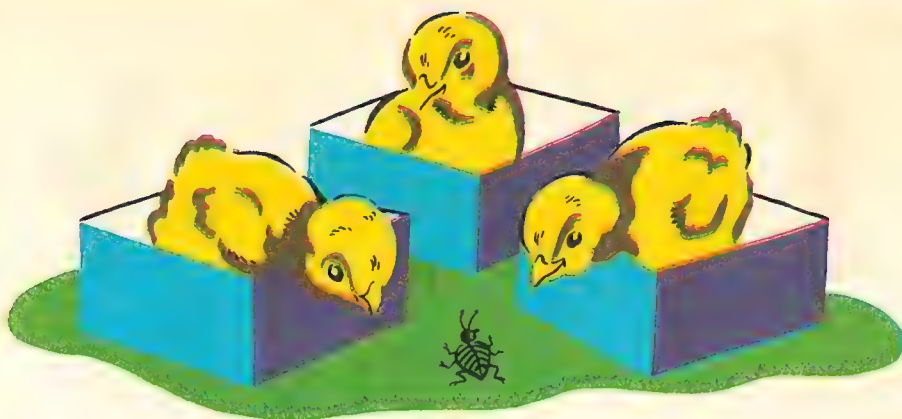
1



$$3 - 1 = ?$$



$$3 - 2 = ?$$



Do three chicks make a group of three?

How many ones are there in a group of three? Do three 1's make 3?

$$3 \times 1 = 3$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array}$$



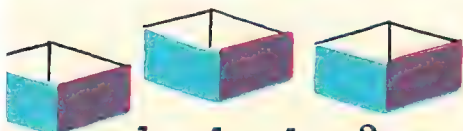
Is this a group of three chicks?

1 group of 3 chicks is how many chicks?

One 3 is 3.

$$1 \times 3 = 3$$

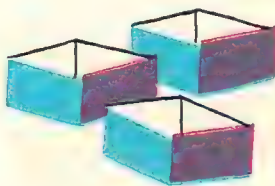
$$\begin{array}{r} 3 \\ \times 1 \\ \hline 3 \end{array}$$



$$1 + 1 + 1 = ?$$

$$3 \times 1 = ?$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$



$$1 \times 3 = ?$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

How Many?



$$1 + 1 = ?$$

$$2 \times 1 = ?$$

$$\begin{array}{r} 1 \quad 1 \\ + 1 \times 2 \\ \hline \end{array}$$



$$2 - 1 = ?$$

$$\begin{array}{r} 2 \\ - 1 \\ \hline \end{array}$$



$$1 \times 2 = ?$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$



$$2 + 1 = ?$$

$$\begin{array}{r} 2 \\ + 1 \\ \hline \end{array}$$



$$1 + 1 + 1 = ?$$

$$1 \times 3 = ?$$

$$3 \times 1 = ?$$



$$1 + 2 = ?$$

$$\begin{array}{r} 1 \\ + 2 \\ \hline \end{array}$$



$$3 - 1 = ?$$

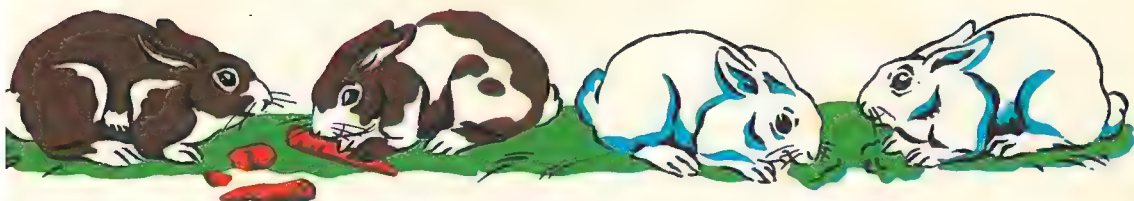
$$\begin{array}{r} 3 \\ - 1 \\ \hline \end{array}$$



$$3 - 2 = ?$$

$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$

How Many Rabbits?



one and one and one and one

How many rabbits are white?

How many rabbits are brown?



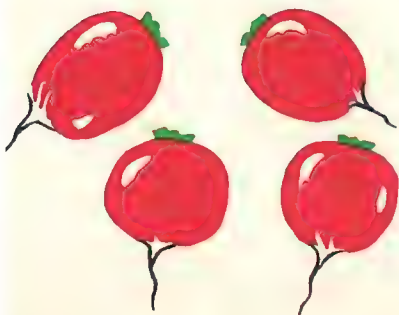
Do you see four rabbits?

Two rabbits and two rabbits
are how many rabbits?

2 and 2 are how many?

$$2 + 2 = 4$$

$$\begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array}$$

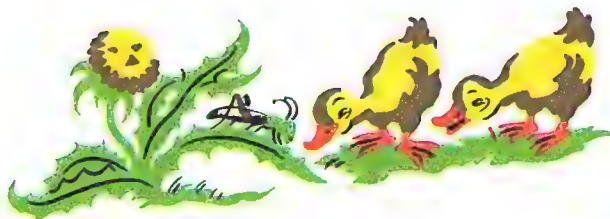


$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

63



$$2 + 2 = ?$$



How Many Ducks?

How many ducks do you see?
 How many big ducks are there?
 How many small ducks are there?



How many are two big ducks
 and two small ducks?

How many groups of two ducks
 do you see?

Does a group of 2 and
 a group of 2 make two 2's?

Two 2's = 4

$$2 \times 2 = 4$$

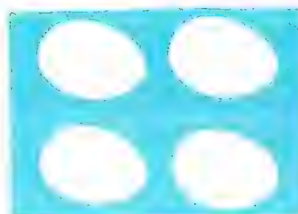
$$\begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array}$$



2 and 2 = ?

2 + 2 = ?

Two 2's = ?



Two \times ? = 4

$$\begin{array}{r} ? \quad 2 \\ + 2 \quad \times ? \\ \hline 4 \quad 4 \end{array}$$



Pets



How many birds are in?

How many birds are going in?

How many birds are there in all?

$$2 + 2 = ? \quad 2 \times 2 = ?$$

Are there two 2's in 4?

There are four birds.

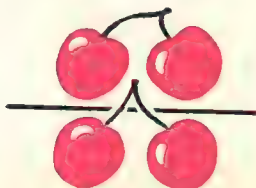
Two go away.

How many are left?



Four take away two
leaves how many?

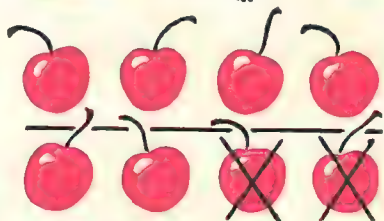
$$4 - 2 = 2$$



$$2 + 2 = ? \quad \begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$2 \times 2 = ?$$

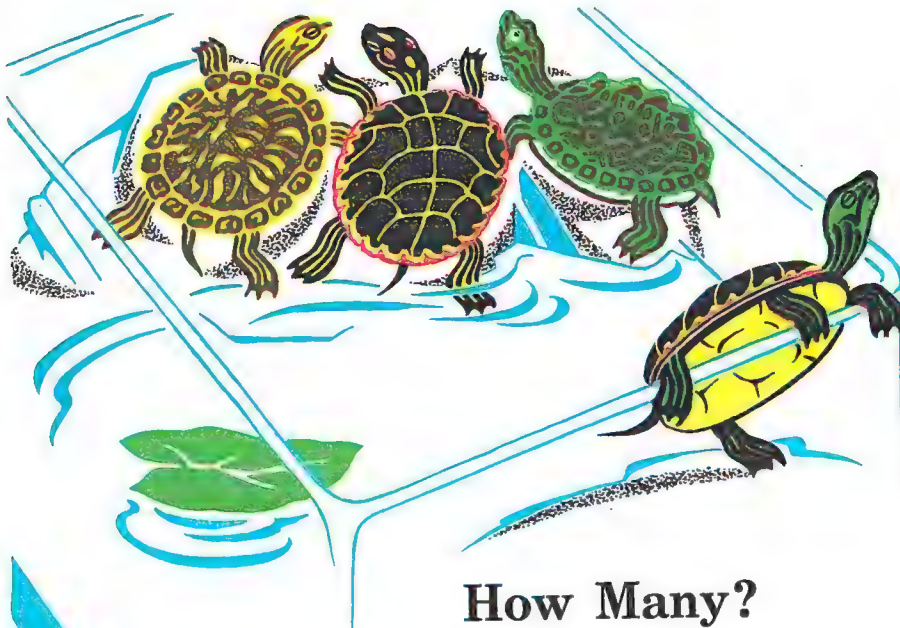
$$\begin{array}{r} 4 \\ - 2 \\ \hline 2 \end{array}$$



$$4 - 2 = ?$$



$$\begin{array}{r} 4 \\ - 2 \\ \hline \end{array}$$



How Many?

Do you see a group of 3 turtles? **3**

Do you see four turtles? **+ 1**

3 turtles and 1 turtle **4**

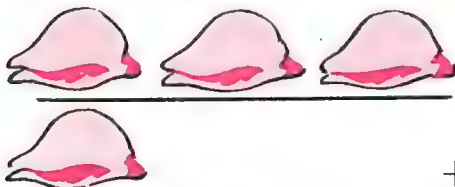
are how many turtles? **1**

Three and one are how many? **+ 3**

One and three are how many? **4**

$$3 + 1 = 4$$

$$1 + 3 = 4$$



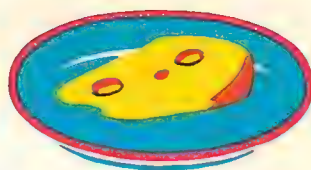
$$\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

$$3 + 1 = ?$$



$$\begin{array}{r} 1 \\ + 3 \\ \hline \end{array}$$

$$1 + 3 = ?$$



How many ones make four?

Do you see two groups of two mice?

Do you see a group of 3 mice and 1 mouse?

$$1 + 1 + 1 + 1 = ? \quad 3 + 1 = ?$$

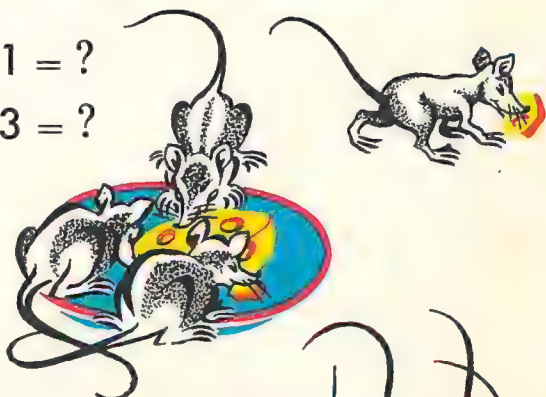
$$2 + 2 = ? \quad 1 + 3 = ?$$

Four mice take away

one mouse leaves **4**

how many mice? $\begin{array}{r} -1 \\ \hline \end{array}$

$$4 - 1 = 3$$



Four mice take away

three mice leaves **4**

how many mice? $\begin{array}{r} -3 \\ \hline \end{array}$

$$4 - 3 = 1$$



$$4 - 3 = ?$$



$$4 - 1 = ?$$



How Many Kittens?

Tell how you know
there are four kittens. $\quad 1$

$$\begin{array}{r} \text{Four } 1\text{'s make how many? } \times 4 \\ 4 \times 1 = 4 \end{array}$$



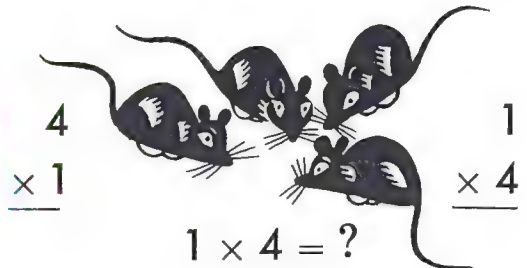
Do 4 kittens
make a group of 4?
1 group of 4 kittens
is how many kittens?

$$\begin{array}{r} \text{One 4 is 4.} \quad 4 \\ \times 1 \\ \hline 4 \end{array}$$

$$1 \times 4 = 4$$



$$4 \times 1 = ?$$







$$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$$

$$1 \times 4 = ?$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$





Four

1					$4 \times 1 = ?$
$\times 4$					



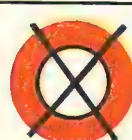
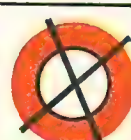
4					$1 \times 4 = ?$
$\times 1$					




2	2					$2 + 2 = ?$
$+ 2$	$\times 2$					$2 \times 2 = ?$

4					$4 - 2 = ?$
$- 2$					


3					$3 + 1 = ?$
$+ 1$					

1					$1 + 3 = ?$
$+ 3$					

4					$4 - 3 = ?$
$- 3$					

4					$4 - 1 = ?$
$- 1$					

Let's Do These

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$


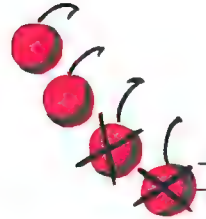
$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

$$2 \times 2 = ?$$




$$\begin{array}{r} 2 \\ - 1 \\ \hline \end{array}$$

$$2 - 1 = ?$$



$$\begin{array}{r} 4 \\ - 2 \\ \hline \end{array}$$

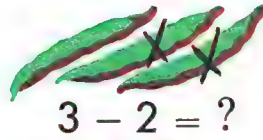
$$4 - 2 = ?$$

$$\begin{array}{r} 2 \\ + 1 \\ \hline \end{array}$$


$$\begin{array}{r} 1 \\ + 2 \\ \hline \end{array}$$

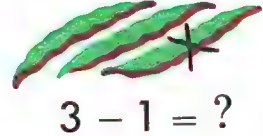
$$2 + 1 = ?$$

$$1 + 2 = ?$$



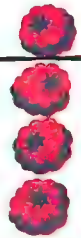
$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$

$$3 - 2 = ?$$



$$\begin{array}{r} 3 \\ - 1 \\ \hline \end{array}$$

$$3 - 1 = ?$$




$$\begin{array}{r} 1 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

$$3 + 1 = ?$$

$$1 + 3 = ?$$



$$\begin{array}{r} 1 \\ + 1 \\ \hline \end{array}$$

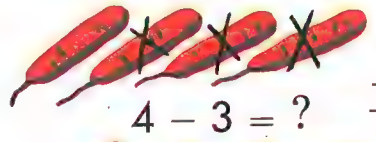
$$2 \times 1 = ?$$

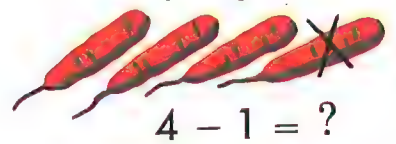
$$1 \times 2 = ?$$

$$1 + 1 = ?$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$




$$\begin{array}{r} 4 \\ - 3 \\ \hline \end{array}$$


$$\begin{array}{r} 4 \\ - 1 \\ \hline \end{array}$$

$$4 - 3 = ?$$

$$4 - 1 = ?$$



$$\begin{array}{r} 1 \\ 1 \\ 1 \\ + 1 \\ \hline \end{array}$$


$$4 \times 1 = ?$$

$$1 \times 4 = ?$$

$$1 + 1 + 1 + 1 = ?$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$$



$$\begin{array}{r} 1 \\ 1 \\ + 1 \\ \hline \end{array}$$

$$3 \times 1 = ?$$

$$1 \times 3 = ?$$

$$1 + 1 + 1 = ?$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

$$3 \times 1 = ?$$

$$1 \times 3 = ?$$

$$1 + 1 + 1 = ?$$

Birthday Parties





How Many?

How many children are there?

How many balloons do you see?

How many balloons do the children have?

Three balloons and two balloons

are how many balloons?

3

Three and two are how many?

+ 2

$$3 + 2 = 5$$

5

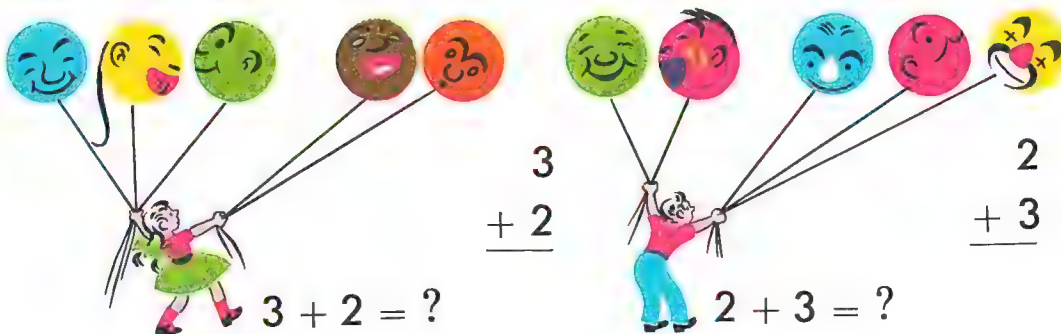
2 and 3 are how many?

2

+ 3

$$2 + 3 = 5$$

5





How many hats do you see?

How many hats do the girls take away?

How many hats are left?

Do three and two make five?

Two and three are how many?

5 take away 2 leaves how many?

$$\begin{array}{r} 5 \\ - 2 \\ \hline 3 \end{array}$$

Three boys take hats,

how many hats are left?

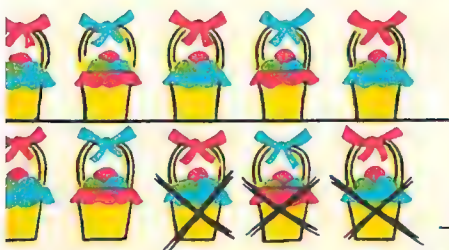
5 take away 3 leaves how many?

$$\begin{array}{r} 5 \\ - 3 \\ \hline 2 \end{array}$$



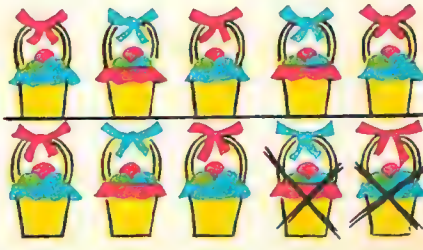
$$5 - 2 = 3$$

$$5 - 3 = 2$$



$$5 - 3 = ?$$

$$\begin{array}{r} 5 \\ - 3 \\ \hline \end{array}$$



$$5 - 2 = ?$$

$$\begin{array}{r} 5 \\ - 2 \\ \hline \end{array}$$



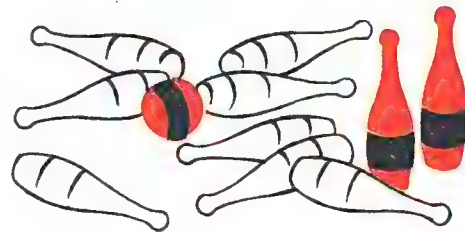
Few



Fewer



Fewest



Many

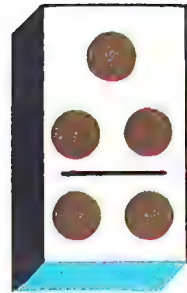
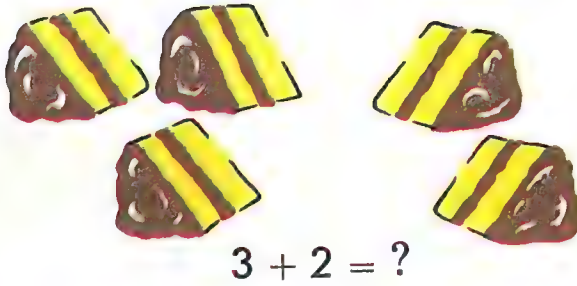
More



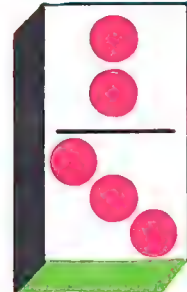
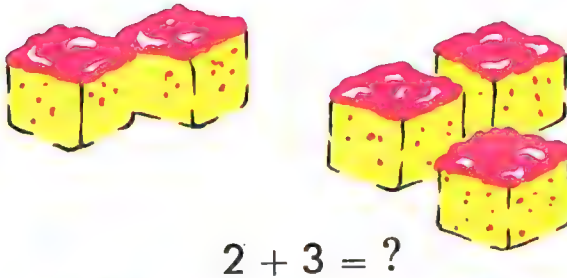
Most



Five



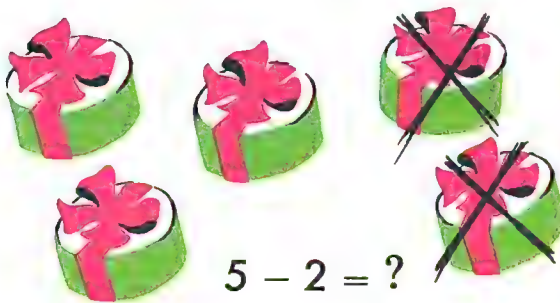
$$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$$



$$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$$



$$\begin{array}{r} 5 \\ - 3 \\ \hline \end{array}$$



$$\begin{array}{r} 5 \\ - 2 \\ \hline \end{array}$$



How Many?

How many girls do you see?

Is there one boy?

Four girls and one boy
are how many children?

Four and one are how many?

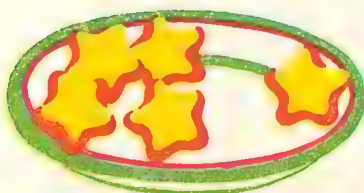
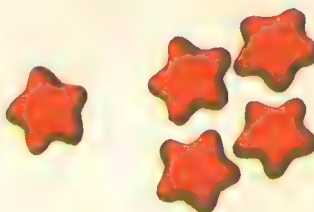
$$4 + 1 = 5$$

$$\begin{array}{r} 4 \\ + 1 \\ \hline 5 \end{array}$$

One and four are how many?

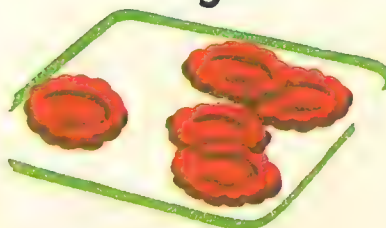
$$1 + 4 = 5$$

$$\begin{array}{r} 1 \\ + 4 \\ \hline 5 \end{array}$$



$$4 + 1 = ?$$

$$\begin{array}{r} 4 \\ + 1 \\ \hline \end{array}$$



$$1 + 4 = ?$$

$$\begin{array}{r} 1 \\ + 4 \\ \hline \end{array}$$



How Many?

One candle is out.

How many are not out?

Five take away one 5
 leaves how many? -1
 $5 - 1 = 4$ 4



How many candles are out now?

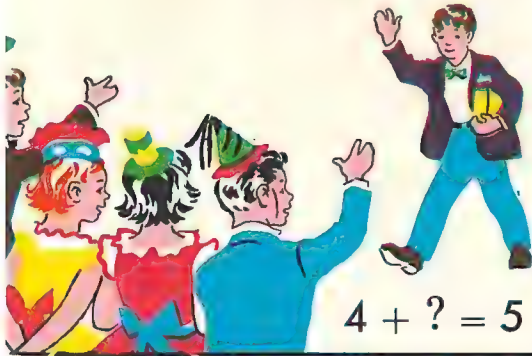
How many candles are not out?

Five take away four 5
 leaves how many? -4
 $5 - 4 = 1$ 1

5
 -1
 $5 - 1 = ?$

5
 -4
 $5 - 4 = ?$

Tell the Number Stories



$$4 + ? = 5$$



$$5 - ? = 1$$



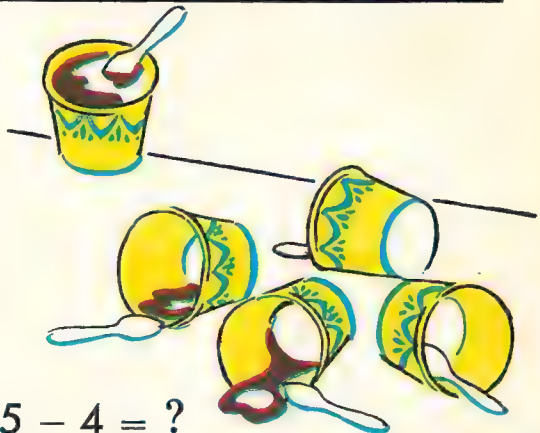
$$1 + ? = 5$$



$$5 - ? = 4$$



$$5 - 1 = ?$$



$$5 - 4 = ?$$



How Many Puppets?

Do you see five puppets?

Do 5 puppets make 1 group of 5?

Do five 1's make 5?

$$5 \times 1 = 5$$

$$\begin{array}{r} 1 \\ \times 5 \\ \hline 5 \end{array}$$



Is there one group of five puppets?

1 group of 5 things is how many?

$$1 \times 5 = 5$$

$$\begin{array}{r} 5 \\ \times 1 \\ \hline 5 \end{array}$$



$$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$$

$$1 \times 5 = ?$$



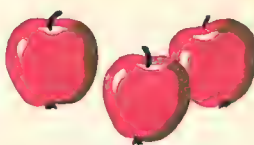
$$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$$

$$5 \times 1 = ?$$

Do You Know These?



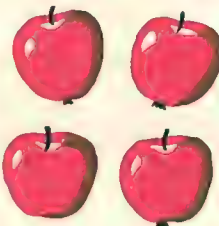
$$\begin{array}{r} ? \\ + 2 \\ \hline 5 \end{array}$$



$$\begin{array}{r} 5 \\ - ? \\ \hline 3 \end{array}$$



$$\begin{array}{r} 5 \\ - ? \\ \hline 2 \end{array}$$



$$\begin{array}{r} ? \\ + 1 \\ \hline 5 \end{array}$$



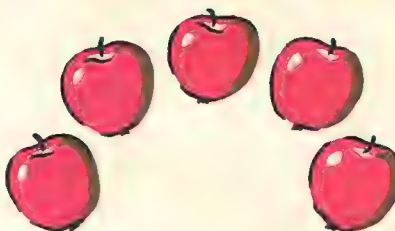
$$\begin{array}{r} ? \\ + 3 \\ \hline 5 \end{array}$$



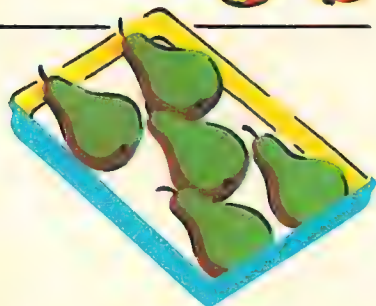
$$\begin{array}{r} 5 \\ - ? \\ \hline 1 \end{array}$$



$$\begin{array}{r} 1 \\ + ? \\ \hline 5 \end{array}$$



$$\begin{array}{r} 1 \\ \times ? \\ \hline 5 \end{array}$$



$$\begin{array}{r} 5 \\ \times ? \\ \hline 5 \end{array}$$

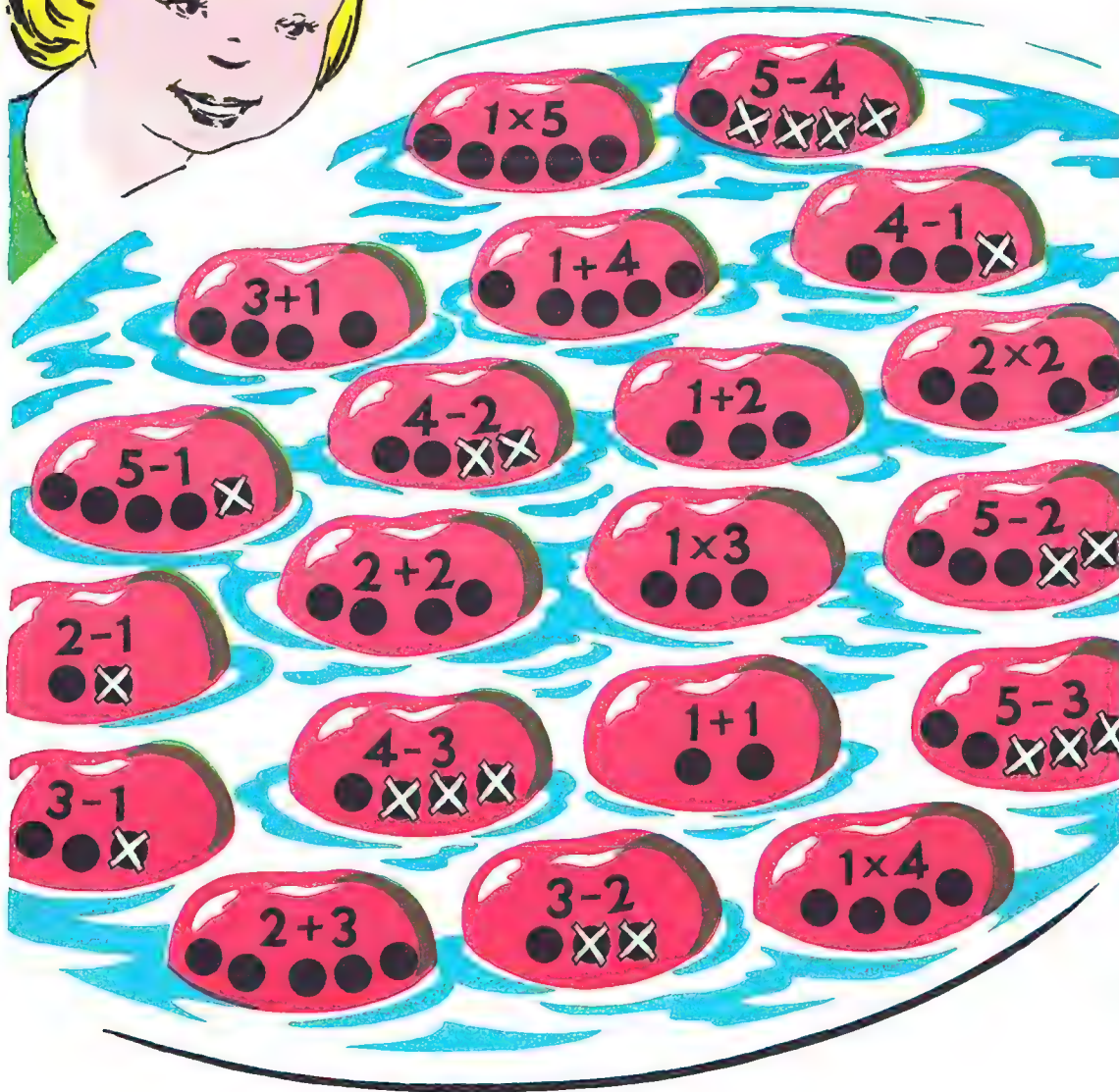


$$\begin{array}{r} 5 \\ - ? \\ \hline 4 \end{array}$$



Number Fun

How many apples can you get out?



Larry's Birthday Party





How Many Children?

How many boys are in this group of children? How many girls?

3 boys and 3 girls are how many children?

A group of 3 things and a group of 3 things are how many?

$$\begin{array}{r} 3 \\ + 3 \\ \hline 6 \end{array}$$

$$3 + 3 = 6$$



$$\begin{array}{r} 6 \text{ take away } 3 \quad 6 \\ \text{leaves how many? } - 3 \\ \hline 3 \end{array}$$

$$6 - 3 = 3$$



$$3 + 3 = ?$$



$$6 - 3 = ?$$



How many are 3 and 3?

Two groups of three children
are how many children?

Two 3's = 6 $2 \times 3 = 6$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$$



How many are
2 and 2 and 2?

3 groups of 2 children
are ? children.

Three 2's = 6

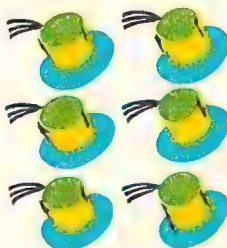
$3 \times 2 = 6$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline 6 \end{array}$$



$2 \times 3 = ?$

$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$



$3 \times 2 = ?$

$$\begin{array}{r} 2 \\ 2 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$



How Many Children?

How many children play this game?

Where do you see a group
of 5 children?

How many are 5 and 1?

$$\begin{array}{r} 5 \\ 1 \end{array}$$

How many are 1 and 5?

$$\begin{array}{r} +1 \\ +5 \end{array}$$

$$5 + 1 = 6 \quad 1 + 5 = 6$$

$$\begin{array}{r} 6 \\ 6 \end{array}$$



Six take away one leaves how many?

$$\begin{array}{r} 6 \\ 6 \end{array}$$

Six take away five leaves how many?

$$\begin{array}{r} -1 \\ -5 \end{array}$$

$$6 - 1 = 5 \quad 6 - 5 = 1$$

$$\begin{array}{r} 5 \\ 1 \end{array}$$



$$\begin{array}{r} 5 \\ +1 \end{array}$$

$$\begin{array}{r} 1 \\ +5 \end{array}$$

$$\begin{array}{r} 6 \\ -1 \end{array}$$

$$\begin{array}{r} 6 \\ -5 \end{array}$$





How many children do you see?

Do you see the children's numbers?

Mother calls out one and four.

How many children run for the ball?

Which children do not run?

Is there a group of 2? A group of 4?

How many are a group of two things
and a group of four things?

$$\begin{array}{r} 2 \quad 4 \\ + 4 \quad + 2 \\ \hline 6 \quad 6 \end{array}$$

6 take away 2 leaves how many?

6 take away 4 leaves how many?

$$\begin{array}{r} 6 \quad 6 \\ - 2 \quad - 4 \\ \hline 4 \quad 2 \end{array}$$

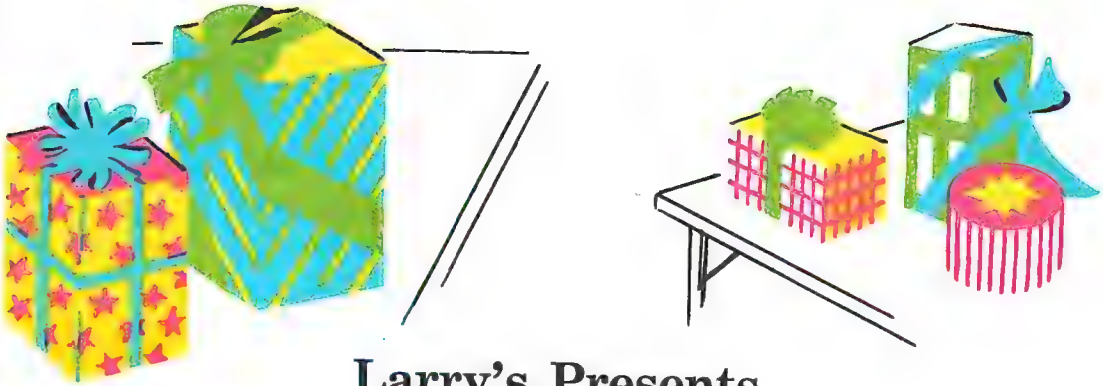


$$4 + 2 = ? \quad 2 \quad 4$$

$$2 + 4 = ? \quad \underline{+ 4} \quad \underline{+ 2}$$

$$6 - 2 = ? \quad 6 \quad 6$$

$$6 - 4 = ? \quad \underline{- 2} \quad \underline{- 4}$$



Larry's Presents

Here are some boxes for Larry.
How many are there on the **big** table?
How many are there on the **small** table?
Are the boxes on one table **bigger**?
Which box is the **biggest** of all?



Larry opened the three **small** boxes.
Do you see the toy dogs?
Do you see Larry's dog?
Are the toy dogs **smaller**?
Which toy dog is the **smallest** one?



How Many?

Do you see these?

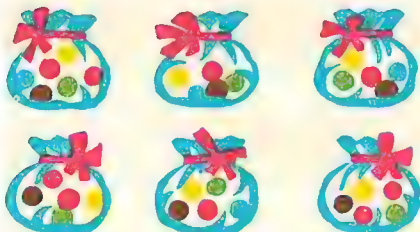
5	1	6	6
<u>+ 1</u>	<u>+ 5</u>	<u>- 1</u>	<u>- 5</u>

$5 + 1 = ?$

$1 + 5 = ?$

$6 - 1 = ?$

$6 - 5 = ?$



Do you see 3 and 3?

$2 \times 3 = ? \quad 3$

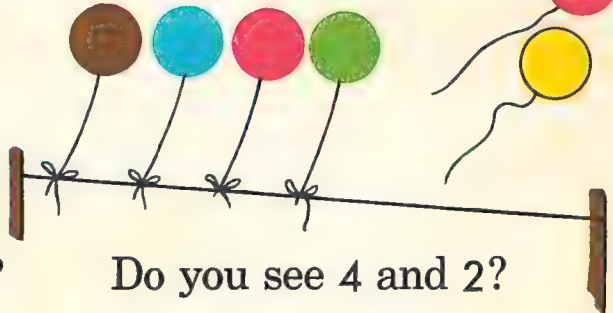
Two 3's = ? $\times 2$

$2 \text{ and } 2 \text{ and } 2 = ?$

$3 \times 2 = ? \quad 2$

Three 2's = ? $\times 3$

$3 + 3 = ? \quad 6 - 3 = ?$



Do you see 4 and 2?

4	2	6	6
<u>+ 2</u>	<u>+ 4</u>	<u>- 2</u>	<u>- 4</u>

$2 \text{ and } 4 = ?$

$4 + 2 = ?$

$6 - 4 = ?$

$2 + 4 = ?$

$6 - 2 = ?$



How Many Cars?

Father gave Jim a toy train.

How many cars do you see?

Are there six ones?

Six 1's = 6

$$6 \times 1 = 6$$

$$\begin{array}{r} 1 \\ \times 6 \\ \hline 6 \end{array}$$



Jim is ready now to run his train.

Are the cars in one group?

How many do you see
in the one group of cars?

One group of 6 = 6

$$1 \times 6 = 6$$

$$\begin{array}{r} 6 \\ \times 1 \\ \hline 6 \end{array}$$



One 6 = ? 6

$$1 \times 6 = ? \quad \underline{\times 1}$$



Six 1's = ? 1

$$6 \times 1 = ? \quad \underline{\times 6}$$

Do You Know These?



$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ - 3 \\ \hline \end{array}$$

$3 + 3 = ?$ Two 3's are ?.

$6 - 3 = ?$ $2 \times 3 = ?$



$$2 + 2 + 2 = ? \quad 2$$

$$3 \times 2 = ? \quad 2$$

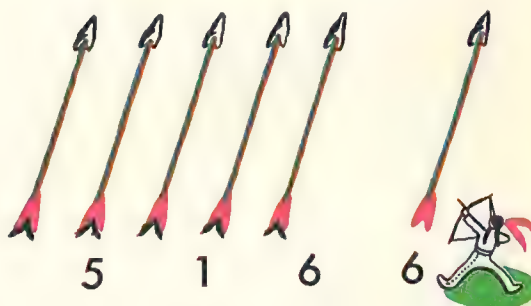
Three 2's are ? $\begin{array}{r} + 2 \\ \hline \end{array}$



$$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ - 2 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ - 4 \\ \hline \end{array}$$

$$4 + 2 = ? \quad 6 - 2 = ?$$

$$2 + 4 = ? \quad 6 - 4 = ?$$



$$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ + 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ - 1 \\ \hline \end{array}$$

$$5 + 1 = ? \quad 6 - 5 = ?$$

$$1 + 5 = ? \quad 6 - 1 = ?$$







$$6 \times 1 = ?$$

Six 1's are ?.



$$1 \times 6 = ?$$

One group of 6 is ?.

4	Do You Know?				1
$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$					$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$

2	4	2	4	4
$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ - 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ - 2 \\ \hline \end{array}$

Two 2's are ?. Four 1's are ?.

One group of four is ?.

5		1
$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$		$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$

3	1	5	2	4	5	5	5
$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ - 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ - 2 \\ \hline \end{array}$

Five 1's are how many?

One group of five is how many?

6		1
$\begin{array}{r} 6 \\ \times 1 \\ \hline \end{array}$		$\begin{array}{r} 1 \\ \times 6 \\ \hline \end{array}$

$3 + 3 = ?$	$2 \times 3 = ?$	$3 \times 2 = ?$
-------------	------------------	------------------

4	1	6	2	6	6	5	6	6
$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ - 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ - 1 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ - 3 \\ \hline \end{array}$

Two 3's are ?.

Six 1's are ?.

Three 2's are ?.

One group of six is ?.

Games Are Fun





How Many?

How many boys do you see?

How many are in each group?

Four boys and three boys
are how many boys in all?

4 and 3 are how many?

$$4 + 3 = 7$$

3 and 4 are how many?

$$3 + 4 = 7$$

$$\begin{array}{r} 4 \quad 3 \\ + 3 \quad + 4 \\ \hline 7 \quad 7 \end{array}$$



7 take away 3 leaves 4.

$$7 - 3 = 4$$

$$\begin{array}{r} 7 \\ - 3 \\ \hline 4 \end{array}$$



7 take away 4 leaves 3.

$$7 - 4 = 3$$

$$\begin{array}{r} 7 \\ - 4 \\ \hline 3 \end{array}$$



How many children are there?

How many boys? How many girls?

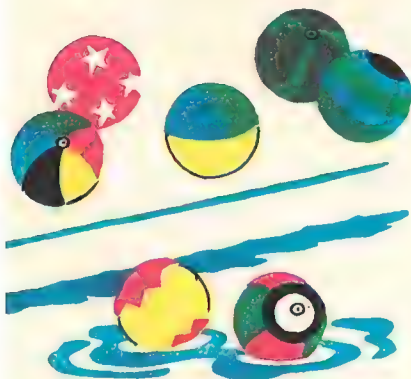
Five boys and two girls
are how many children?

Two and five are how many?

$$5 + 2 = 7$$

$$2 + 5 = 7$$

$$\begin{array}{r} 5 \quad 2 \\ + 2 \quad + 5 \\ \hline 7 \quad 7 \end{array}$$



Joe and Tom throw
their balls into the water.

How many balls are left? 7

7 take away 2 leaves 5.

$$7 - 2 = 5$$

$$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$$

How many balls
are in the water now?

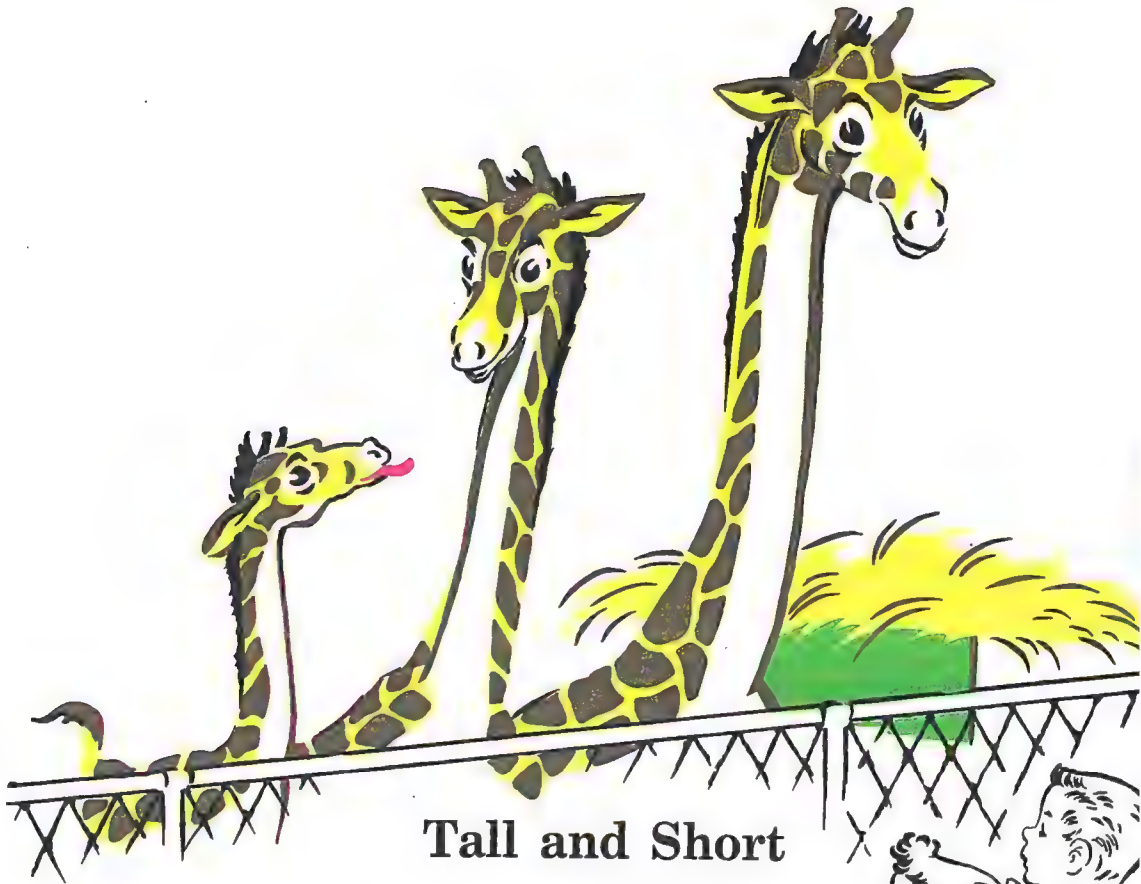
How many balls are left? 7

7 take away 5 leaves 2.

$$7 - 5 = 2$$

$$\begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array}$$





Tall and Short

Do you see the baby?
The mother is next to the baby.
Is the mother **taller**?
Do you see the father?
Is he **tallest** of all?
Are the mother, the father,
and the baby all **tall** animals?

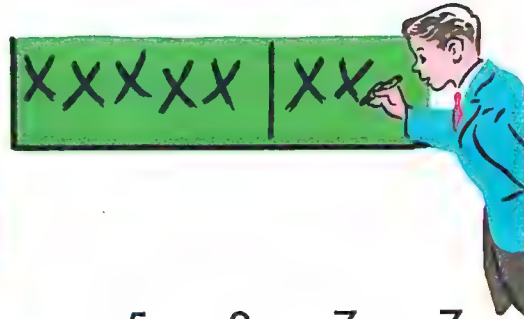
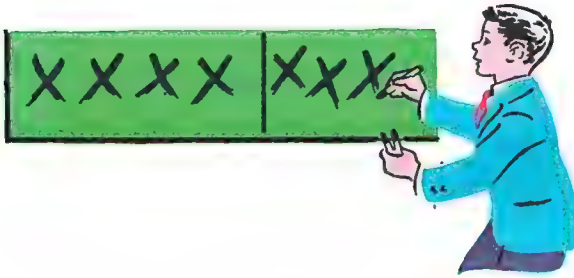




The clown with the pig is **short**.
The clown with the dog is **shorter**.
Which clown is the **shortest** of all?
What is he doing?



Let's Do These



$$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ - 4 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 5 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{llll} 4 + 3 = ? & 7 - 4 = ? & 5 + 2 = ? & 7 - 5 = ? \\ 3 + 4 = ? & 7 - 3 = ? & 2 + 5 = ? & 7 - 2 = ? \end{array}$$

Four and three are how many?

Seven take away five leaves how many?

Two and how many are seven?

Three and four are how many?

Seven take away two leaves how many?

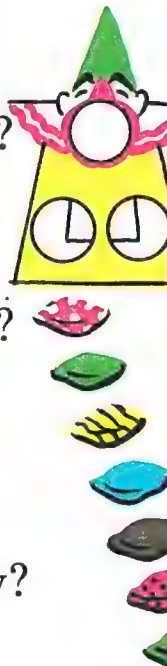
7 take away how many leaves 4?

Five and two are how many?

7 take away 3 leaves how many?

Seven take away four leaves how many?

2 and 5 are how many?





How Many Boys?

The boys play a game of catch ball.

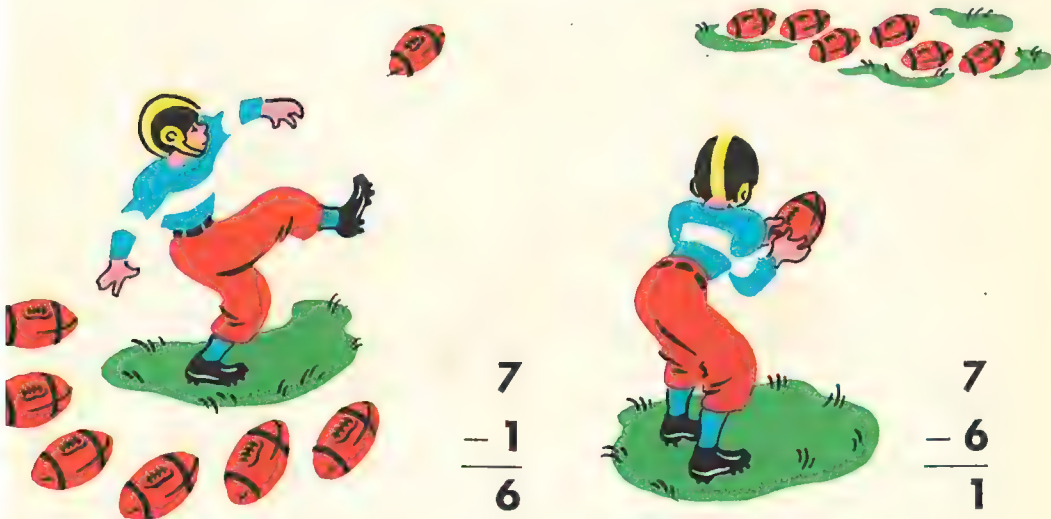
How many boys are there in all?

Do you see 6 boys and 1 boy?

$$6 + 1 = 7$$

$$1 + 6 = 7$$

$$\begin{array}{r} 6 \quad 1 \\ + 1 \quad + 6 \\ \hline 7 \quad 7 \end{array}$$



$$\begin{array}{r} 7 \\ - 1 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 7 \\ - 6 \\ \hline 1 \end{array}$$

7 take away 1 = 6

$$7 - 1 = 6$$

7 take away 6 = 1

$$7 - 6 = 1$$



How Many?

Seven horse shoes is a group of seven.

7 boys is 1 group of how many?

Seven 1's = 7

$$7 \times 1 = 7$$

$$\begin{array}{r} 1 \\ \times 7 \\ \hline 7 \end{array}$$



Do you see one group of seven horse shoes?

1 group of 7 horse shoes is how many?

One 7 = 7

$$1 \times 7 = 7$$

$$\begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array}$$

Tell the Number Stories



$$6 + 1 = ? \quad 7 - 2 = ? \quad 2 + ? = 7 \quad 1 + ? = 7$$

$$3 + ? = 7 \quad 1 \times 7 = ? \quad 7 - 4 = ? \quad ? + 3 = 7$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ +3 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ -3 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ +2 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ -5 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ -6 \\ \hline \end{array}$$



Seven boys play ball. One boy goes home. How many are left?

Five boys go for a swim. Two more boys come to swim with them.

How many boys are there in all?

How many children are in a game, if there are 4 girls and 3 boys?

7 children play ball. 4 children play house. Which group has more children? How many more?

IN
↓

Can You Find Your Way Out?

$$\begin{array}{r} 2 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -3 \\ \hline \end{array}$$



$$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -2 \\ \hline \end{array}$$



$$\begin{array}{r} 2 \\ +2 \\ \hline \end{array}$$



$$\begin{array}{r} 4 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

←OUT $\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$

$$\begin{array}{r} 7 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +5 \\ \hline \end{array}$$



$$\begin{array}{r} 6 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +2 \\ \hline \end{array}$$

How Many Girls?

How many girls do you see?

How many are in each group?

4 and 4 are how many?

$$4 + 4 = 8$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline 8 \end{array}$$



2 groups of 4 things
are how many things?

$$2 \times 4 = 8$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$$



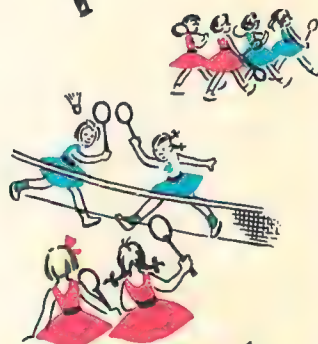
The game is over.

How many girls go home?

8 take away 4 leaves?

$$8 - 4 = 4$$

$$\begin{array}{r} 8 \\ - 4 \\ \hline 4 \end{array}$$



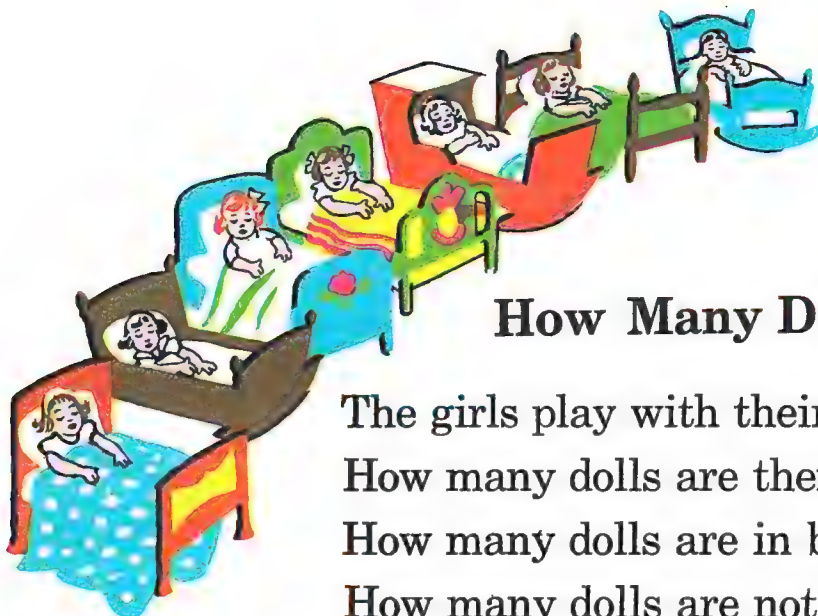
How many groups of two birds
do you see?

Tell an of story
about the birds.

$$4 \times 2 = 8$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array}$$





How Many Dolls?

The girls play with their dolls.

How many dolls are there?

$$\begin{array}{r} 1 \\ + 7 \\ \hline 8 \end{array}$$

How many dolls are in bed?

How many dolls are not in bed?

Do you see a group of seven?

Seven and one are how many?

$$\begin{array}{r} 7 \\ + 1 \\ \hline 8 \end{array}$$

One and seven are how many?

$$7 + 1 = 8 \quad 1 + 7 = 8$$



$$\begin{array}{r} 8 \\ - 1 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 8 \\ - 7 \\ \hline 1 \end{array}$$

$$8 \text{ take away } 1 = 7$$

$$8 \text{ take away } 7 = 1$$

$$8 - 1 = 7$$

$$8 - 7 = 1$$

About Eight



$$7 + 1 = ?$$

$$7 \quad 1$$

$$8 - 1 = ?$$

$$8 \quad 8$$

$$1 + 7 = ?$$

$$\begin{array}{r} +1 \\ +7 \end{array}$$

$$8 - 7 = ?$$

$$\begin{array}{r} -1 \\ -7 \end{array}$$

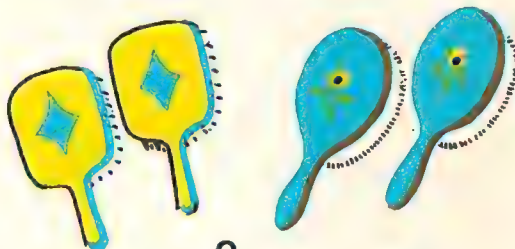
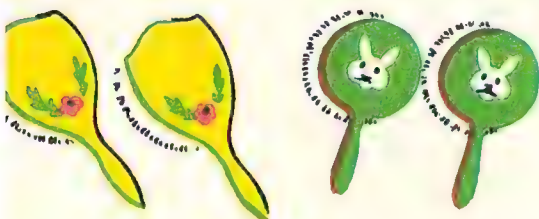


$$4 + 4 = ?$$

$$\begin{array}{r} 4 \quad 4 \\ \times 2 \quad + 4 \end{array}$$

$$8 - 4 = ?$$

$$\begin{array}{r} 8 \\ - 4 \end{array}$$



$$2 + 2 + 2 + 2 = ?$$

$$4 \times ? = 8$$

$$\begin{array}{r} 2 \\ \times 4 \end{array}$$

Do you know these number stories?

$$\begin{array}{r} 8 \\ - 7 \end{array} \quad \begin{array}{r} 2 \\ \times 4 \end{array} \quad \begin{array}{r} 1 \\ + 7 \end{array} \quad \begin{array}{r} 4 \\ + 4 \end{array} \quad \begin{array}{r} 8 \\ - 1 \end{array} \quad \begin{array}{r} 8 \\ - 4 \end{array} \quad \begin{array}{r} 4 \\ \times 2 \end{array} \quad \begin{array}{r} 7 \\ + 1 \end{array}$$



How Many?

How many children play the game?

Do you see 6 children and 2 children?

Six and two are how many?

6 2

Two and six are how many?

+ 2 + 6
8 8

$$6 + 2 = 8 \quad 2 + 6 = 8$$

If six children go away,
how many are left?

Eight take away six leaves?.

8

$$8 - 6 = 2$$

- 6
2

If two children go away,
how many are left?

Eight take away two leaves?.

8

$$8 - 2 = 6$$

- 2
6





What game do the children play?

How many girls are there?

What number story do you see?

Do you see five and three?

5 and 3 are how many?

3 and 5 are how many?

$$5 + 3 = 8$$

$$3 + 5 = 8$$

$\begin{array}{r} 5 \\ + 3 \\ \hline 8 \end{array}$	$\begin{array}{r} 3 \\ + 5 \\ \hline 8 \end{array}$
---	---

If 3 children take
their jump ropes,
how many are left?

$$8 - 3 = 5$$

$$\begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array}$$



If 5 children take
their jump ropes,
how many are left?

$$8 - 5 = 3$$

$$\begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array}$$





Fun with Dolls

Do you like to dress dolls?
Is the blue dress **long**?
Is the green dress **longer**
than the blue dress?
Which is the **longest** dress?



Find a doll with **long** hair.
Which dolls have **longer** hair?
Which doll has the **longest** hair?



How Many Children?

How many children
are in this group?

One group of eight
is how many? **8**

Does $1 \times 8 = 8$? $\times 1$

One 8 = 8 **8**

How many ones
do you see?

Eight ones
are how many? **1**

Does $8 \times 1 = 8$? $\times 8$

Eight 1's = 8 **8**

Do you know these?

$$6 + 2 = ?$$

$$8 - 3 = ?$$

$$1 \times 8 = ?$$

$$5 + 3 = ?$$

$$8 - 6 = ?$$

$$8$$

$$\begin{array}{r} -4 \\ \hline \end{array}$$

$$7$$

$$\begin{array}{r} +1 \\ \hline \end{array}$$

$$1$$

$$\begin{array}{r} \times 8 \\ \hline \end{array}$$

$$2$$

$$\begin{array}{r} \times 4 \\ \hline \end{array}$$

$$3$$

$$\begin{array}{r} +5 \\ \hline \end{array}$$

$$8$$

$$\begin{array}{r} -5 \\ \hline \end{array}$$

$$8$$

$$\begin{array}{r} \times 1 \\ \hline \end{array}$$

$$4$$

$$\begin{array}{r} \times 2 \\ \hline \end{array}$$

$$8$$

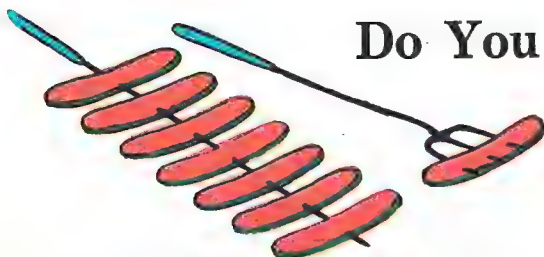
$$\begin{array}{r} -2 \\ \hline \end{array}$$

$$2$$

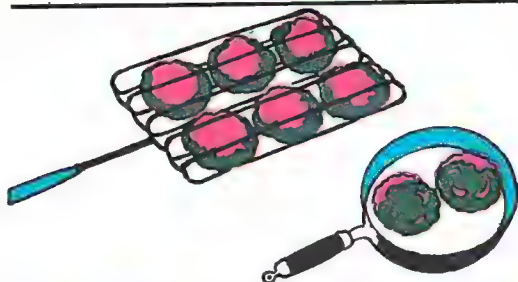
$$\begin{array}{r} +6 \\ \hline \end{array}$$



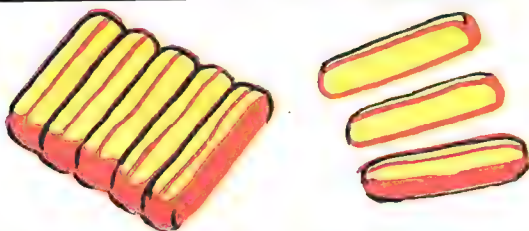
Do You Know These?



$\begin{array}{r} 7 \\ + 1 \\ \hline 8 \end{array}$	$\begin{array}{r} 1 \\ + 7 \\ \hline 8 \end{array}$	$\begin{array}{r} 8 \\ - 7 \\ \hline 1 \end{array}$	$\begin{array}{r} 8 \\ - 1 \\ \hline 7 \end{array}$
---	---	---	---



$\begin{array}{r} 6 \\ + 2 \\ \hline 8 \end{array}$	$\begin{array}{r} 2 \\ + ? \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - ? \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - ? \\ \hline \end{array}$
---	---	---	---



$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} ? \\ + ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ - ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ - ? \\ \hline \end{array}$
---	---	---	---



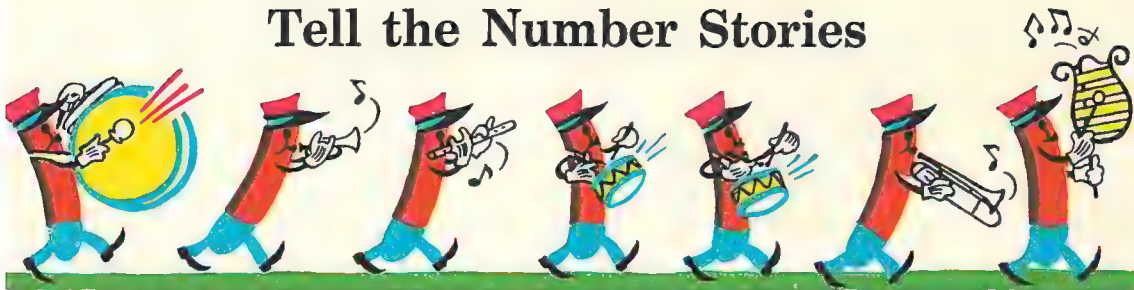
$\begin{array}{r} ? \\ + ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ - ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ \times ? \\ \hline \end{array}$
---	---	--



$\begin{array}{r} ? \\ \times ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ \times ? \\ \hline \end{array}$	$\begin{array}{r} ? \\ \times ? \\ \hline \end{array}$
--	--	--



Tell the Number Stories



4	1	6	7	3	7	7
<u>+ 3</u>	<u>× 7</u>	<u>+ 1</u>	<u>- 1</u>	<u>+ 4</u>	<u>- 2</u>	<u>- 5</u>

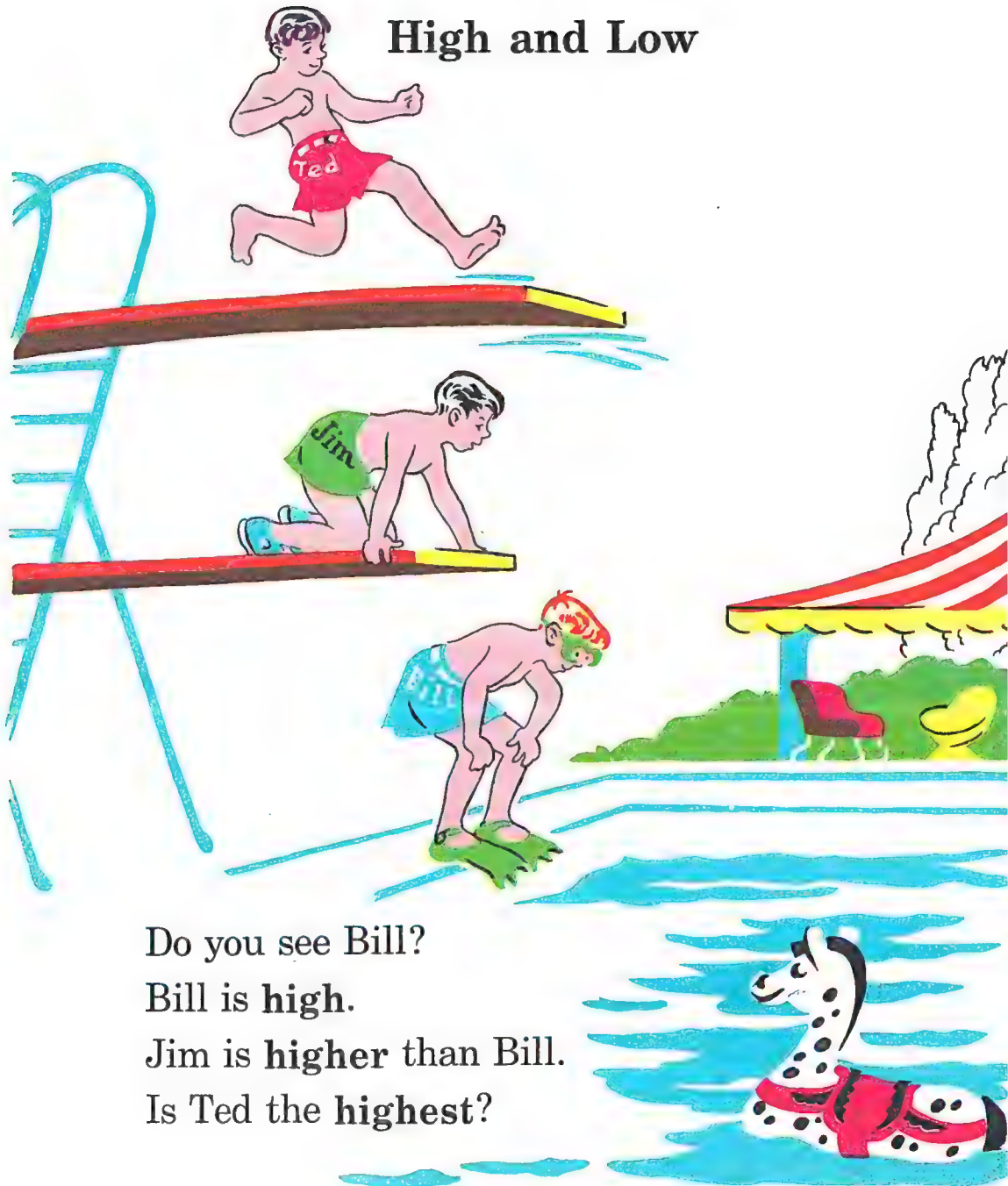
5	7	7	7	2	1	7
<u>+ 2</u>	<u>- 4</u>	<u>- 6</u>	<u>- 3</u>	<u>+ 5</u>	<u>+ 6</u>	<u>× 1</u>

$3 + 4 = ?$	$7 - 6 = ?$	$1 + 6 = ?$	$4 + 3 = ?$
$6 + 1 = ?$	$5 + 2 = ?$	$2 + 5 = ?$	$7 \times 1 = ?$
$7 - 4 = ?$	$7 - 1 = ?$	$7 - 3 = ?$	$7 - 5 = ?$



$3 + 5 = ?$	$4 + 4 = ?$	$2 + 6 = ?$	$5 + 3 = ?$
$2 \times 4 = ?$	$6 + 2 = ?$	$7 + 1 = ?$	$1 + 7 = ?$
$8 \times 1 = ?$	$4 \times 2 = ?$	$1 \times 8 = ?$	$8 - 6 = ?$
$8 - 5 = ?$	$8 - 1 = ?$	$8 - 2 = ?$	$8 - 4 = ?$
$8 - 3 = ?$	$8 - 7 = ?$	One 8 = ?	Two 4's = ?

High and Low



Do you see Bill?
Bill is **high**.
Jim is **higher** than Bill.
Is Ted the **highest**?



Why are the children so **low**
on the ground?

Jack is **low**.

Mike is **lower** than Jack.

Which boy is **lowest**?

Why is he so **low**?



How Many?

Do you play this game?

9

How many children are in this game?

$\times 1$

Nine children is a group

9

of how many ones?

1

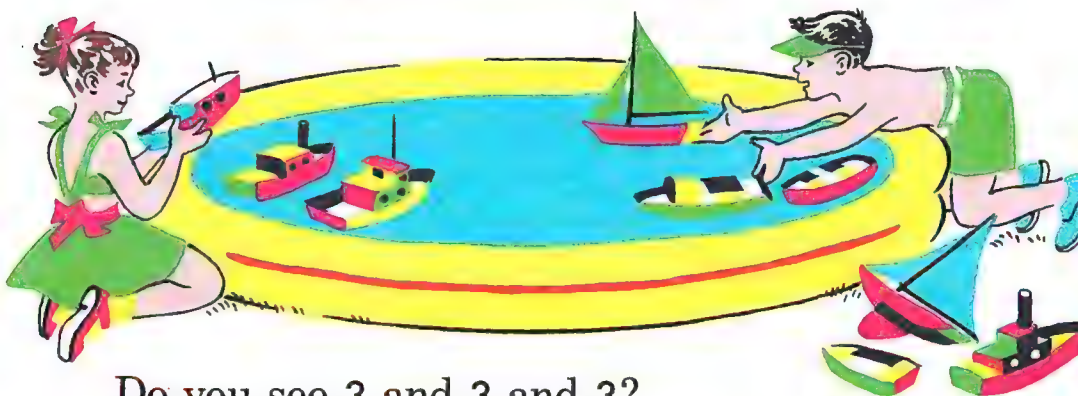
One group of nine ones is how many?

$\times 9$

$$1 \times 9 = 9$$

$$9 \times 1 = 9$$

9



Do you see 3 and 3 and 3?

3

Three groups of three boats

3

3

are how many boats?

$+ 3$

$\times 3$

$$3 \times 3 = 9$$

9

9

Do you have
this game at home?

What number groups
do you see?

Where do you see
a group of nine things?



What number stories
do you see here?

Can you find $5 + 4$? **5**

Do you see $4 + 5$? **+ 4**

Five and four
are how many?

Four and five
are how many?

9

4

+ 5

9



Nine take away five leaves how many?

Nine take away four leaves how many?

$$4 + 5 = 9$$

$$5 + 4 = 9$$

$$9 - 5 = 4$$

$$9 - 4 = 5$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline 5 \end{array} \quad \begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array}$$

How Many?

Do you like
to play marbles?
Where do you play?
How many marbles
do you see? 9 1
 $\times 1$ $\times 9$



Jack will play now.

Can you hit more marbles
out of the ring than Jack did?

Are there more marbles
out or more marbles in?

What number stories
do you see?

Find an **and** story.

Find a **take away** story.



$$\begin{array}{r} 6 \\ + 3 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 9 \\ - 6 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 9 \\ - 3 \\ \hline 6 \end{array}$$

Number Stories

$$\begin{array}{r} 9 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$$



$5 + 4 = ?$

$9 \times 1 = ?$

$3 \times 3 = ?$

$4 + 5 = ?$

$9 - 6 = ?$

$9 - 4 = ?$

$3 + 6 = ?$

$9 - 3 = ?$

Sue has 3 blue balls, 3 red balls and 3 green balls. How many balls does she have in all?

Nancy saw 4 blue birds and 5 orange birds. How many birds did Nancy see?

Nine children are on the school bus. Six are boys. How many are girls?





Left



Right

Front

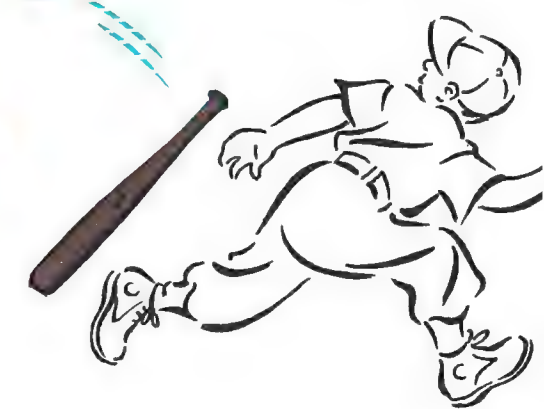
Back



Here



There





How Many Children?

This game is fun for children.

Do you play this game?

How many children play this game?

How many children bend over?

Do you see 7 children who will jump?

Tell two **and** stories about the children.

7 children have jumped.

How many children
have not jumped?

Tell two **take away** stories
about the game.



$$2 + 7 = 9$$

$$7$$

$$2$$

$$9 - 7 = 2$$

$$9$$

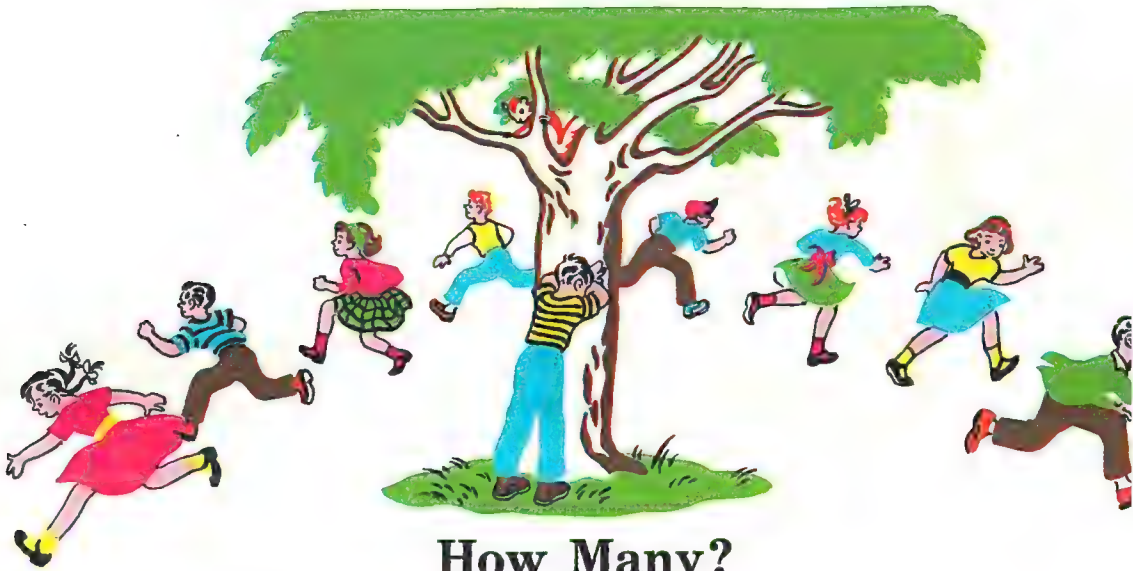
$$9$$

$$\begin{array}{r} 7 + 2 = 9 \\ + 2 \\ \hline 9 \end{array}$$

$$\begin{array}{r} + 7 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 9 - 2 = 7 \\ - 7 \\ \hline 2 \end{array}$$

$$\begin{array}{r} - 2 \\ \hline 7 \end{array}$$



How Many?

Do you have one game
that is the most fun? What is it?

How many children play the game
that you see here?

Do you have number stories
in all games? What number story
do you see in this game?

Find the story $8 + 1 = 9$.

Find the story $1 + 8 = 9$.

Do you see **take away** stories?

Tell them.

$$\begin{array}{r} 8 \quad 1 \\ + 1 \quad + 8 \\ \hline 9 \quad 9 \end{array}$$

$$9 - 8 = 1 \quad 9 - 1 = 8$$

$$\begin{array}{r} 9 \quad 9 \\ - 8 \quad - 1 \\ \hline 1 \quad 8 \end{array}$$



Let's Do These

Jim has 9 cars in his train.
He takes away 2 cars. How many
cars has Jim in his train now?



$$7 + ? = 9$$

$$2 + ? = 9$$

$$9 - 2 = ?$$

$$9 - 7 = ?$$

Nancy has 9 peanuts. She gives
1 peanut to the monkey. How many
does she have then?

7	2	8	1	9	9	9	9
<u>+2</u>	<u>+7</u>	<u>+1</u>	<u>+8</u>	<u>-7</u>	<u>-2</u>	<u>-8</u>	<u>-1</u>

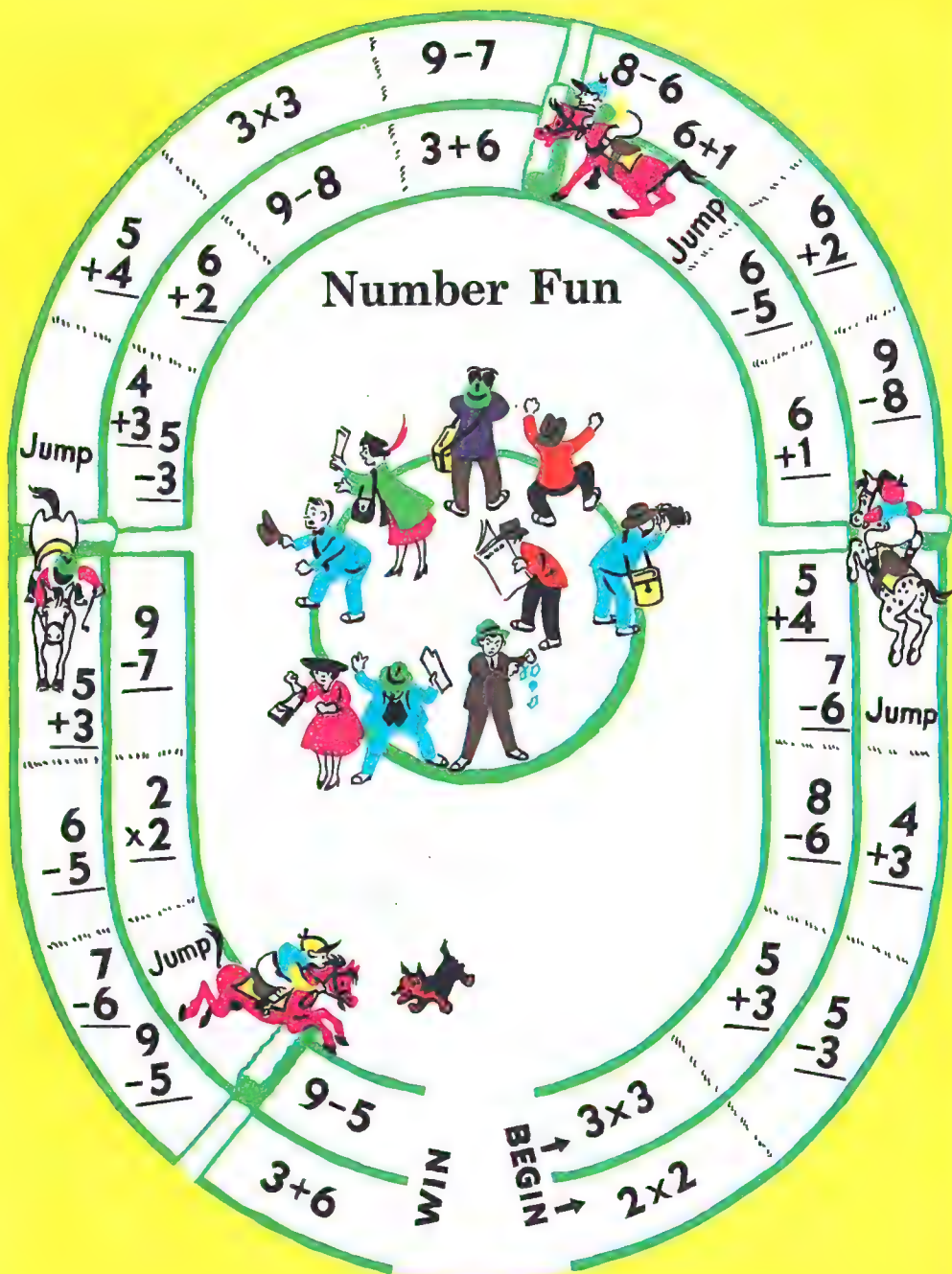


$$8 + 1 = ?$$

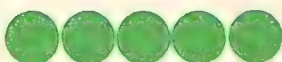
$$1 + ? = 9$$

$$9 - 1 = ?$$

$$9 - 8 = ?$$



Tell the Number Stories



3	3 + 3 + 3 = ?
3 3	
<u>+ 3</u> <u>× 3</u>	3 × 3 = ?
Three 3's are ?.	

5	4	9	9
<u>+ 4</u>	<u>+ 5</u>	<u>- 5</u>	<u>- 4</u>
5 + 4 = ?	9 - 5 = ?		
4 + 5 = ?	9 - 4 = ?		



6	3	9	9
<u>+ 3</u>	<u>+ 6</u>	<u>- 6</u>	<u>- 3</u>
6 + 3 = ?	9 - 6 = ?		
3 + 6 = ?	9 - 3 = ?		

7	2	9	9
<u>+ 2</u>	<u>+ 7</u>	<u>- 7</u>	<u>- 2</u>
7 + 2 = ?	9 - 7 = ?		
2 + 7 = ?	9 - 2 = ?		



8	1	9	9
<u>+ 1</u>	<u>+ 8</u>	<u>- 8</u>	<u>- 1</u>
8 + 1 = ?	9 - 8 = ?		
1 + 8 = ?	9 - 1 = ?		

1 × 9 = ?	9	1
9 × 1 = ?	<u>× 1</u>	<u>× 9</u>
Nine 1's are ?.		
One group of 9 is ?.		

Let's Do These



7	7	4	7	6	7
<u>- 5</u>	<u>- 2</u>	<u>+ 3</u>	<u>- 1</u>	<u>+ 1</u>	<u>- 4</u>

3	7	2	7	1	5
<u>+ 4</u>	<u>- 3</u>	<u>+ 5</u>	<u>- 6</u>	<u>+ 6</u>	<u>+ 2</u>



8	1	5	8	2	8	8	4
<u>- 4</u>	<u>+ 7</u>	<u>+ 3</u>	<u>- 6</u>	<u>+ 6</u>	<u>- 2</u>	<u>- 7</u>	<u>× 2</u>

3	8	7	8	2	8	4	6
<u>+ 5</u>	<u>- 1</u>	<u>+ 1</u>	<u>- 3</u>	<u>× 4</u>	<u>- 5</u>	<u>+ 4</u>	<u>+ 2</u>



9	1	9	3	9	7	9	4
<u>- 2</u>	<u>+ 8</u>	<u>- 1</u>	<u>+ 6</u>	<u>- 8</u>	<u>+ 2</u>	<u>- 3</u>	<u>+ 5</u>

9	2	8	9	6	9	5	9
<u>- 4</u>	<u>+ 7</u>	<u>+ 1</u>	<u>- 6</u>	<u>+ 3</u>	<u>- 5</u>	<u>+ 4</u>	<u>- 7</u>

A Day at the Park





Mike Buys Ice Cream

Mike has 9 pennies. He buys
ice cream for 8 pennies.

Mike's pennies:



Find three groups of 3 pennies.

How many are three 3's?

9 pennies are ? more than 8 pennies.

The number that is 1 more than 8 is ?.

9 take away 1 is how many?

8 and 1 = ?

9 take away 8 is how many?

1 and 8 = ?



Sue Takes a Ride

Sue has 8 pennies. She takes a ride. How much is a ride?

Sue's pennies:



Find two groups of 4 pennies.

How many are two 4's?

If Sue's ride is 7 pennies,
how many pennies will she have left?

8 pennies are 1 penny and ? pennies.

8 is ? more than 7.

The number that is 1 more than 7 is ?.

8 take away 1 is ?. 8 take away 7 is ?.



How Many Pennies?

Ann has 7 pennies. She buys
a candy apple for 6 pennies.

Ann's pennies:



She has ? pennies.

She gives the man ? pennies.

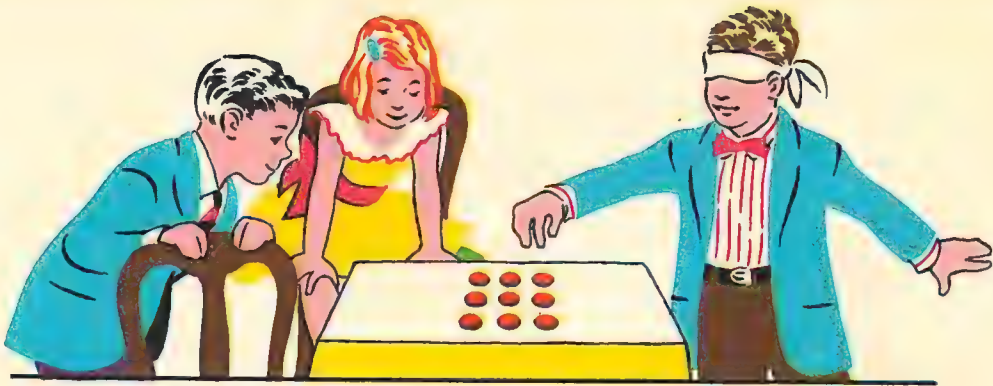
How many will Ann have then?

7 is 1 more than ?.

7 take away 6 is ?.

6 and 1 are ?. 1 and 6 are ?.

6	1	7	7
<u>+ 1</u>	<u>+ 6</u>	<u>- 6</u>	<u>- 1</u>



The children play **How Many Pennies**.

Jim finds one and one more.

One penny and one penny
are how many pennies?

When he finds one more,
that will make ? pennies.

Three pennies and one penny
are how many pennies?

Tell what the numbers will be
when Jim finds one more every time.

6 pennies and 1 penny are ? pennies.

8 pennies are ? more than 7 pennies.

9 pennies are ? penny and 8 pennies.

1	2	3	4	5	6	7	8
<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>	<u>+1</u>

How Many Do You See?



one



one two



one two three



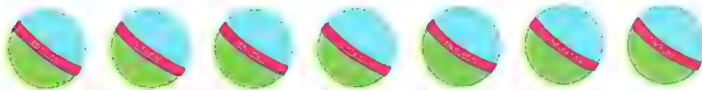
one two three four



one two three four five



one two three four five six



one two three four five six seven



one two three four five six seven eight



one two three four five six seven eight nine

You are counting when you tell how many.



one . . there is one.



one . . two . . there are two.

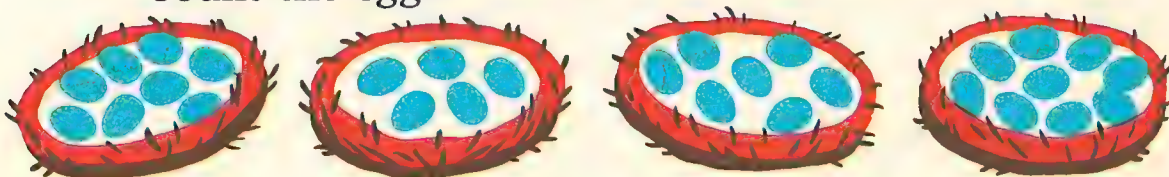


one . . two . . three . . there are three.

Count the mice:

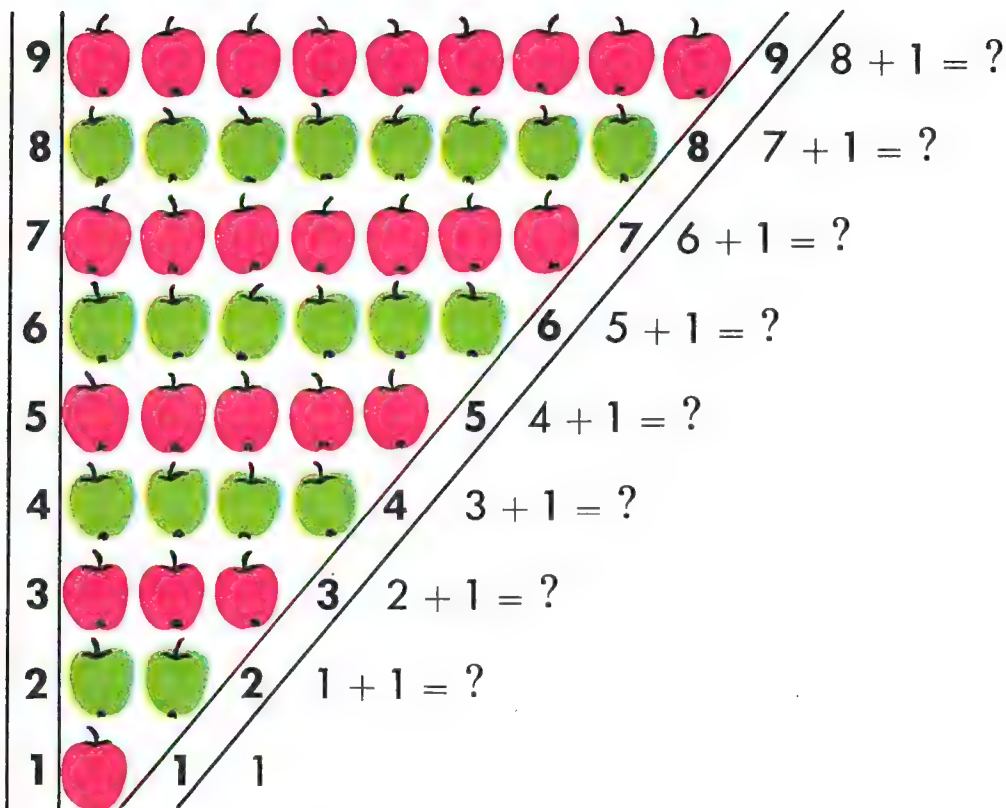


Count the eggs:



Counting

What Numbers Tell



Count the apples in each row.

Read the numbers from the bottom up.

How do the groups grow each time?

What do the numbers tell you
about the apples?

Bigger Numbers

Do you know the three number names after nine? They are **ten**, **eleven**, and **twelve**. The numbers for these names are **10**, **11**, and **12**.

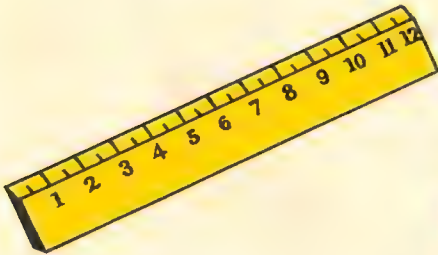
This is how we make the **0** in **10**.

The number names with the numbers for one to twelve are:



one	two	three	four	five	six	seven
1	2	3	4	5	6	7
eight	nine	ten	eleven	twelve		
8	9	10	11	12		

Say the numbers on the ruler.



Say the numbers on the clock face.



Count the pennies.





The Clock

Why do we have clocks?

What numbers do you see
on this clock face?

There is a big hand
and there is a small hand.

Do you see the hands?

Which way do the hands move
on a clock face?

When the small hand moves
from 3 to 4, 1 hour has gone.

How long will it take
the small hand to go from 8 to 9?

The big hand goes all the way
around the clock face in 1 hour.

Read the numbers on the clock face.

What number comes after 9? before 12?

Do you know how long 1 hour is?

Tell some things that take you
an hour to do.



Sue looked at the clock when she went to bed. It was 8 o'clock. When she got up the next morning it was 8 o'clock.



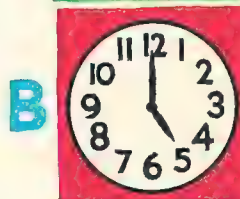
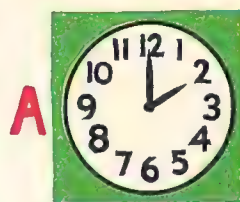
The small hand goes all the way around the clock in 12 hours. How many hours did Sue sleep?

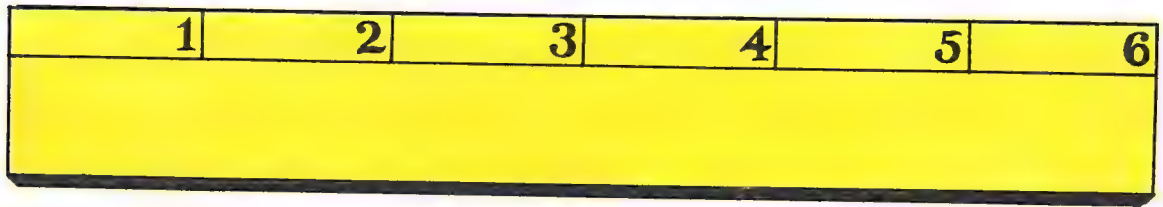


From the time that the clock was at 7 this morning, to the time it reads 7 at night, is how many hours?

How many times will the big hand go around the clock face in 12 hours?

Look at the clocks. How many hours will it take the small hand to move from where it is in clock A to where it is in clock B?
from clock B to where it is in clock C?





The Ruler

The numbers on the ruler tell the inches.

How many inches do you see
on the ruler? Put one finger on 5.

Put another finger on 6.

That part of the ruler is 1 inch long.

How long are 2 inches on the ruler?

Some rulers are 12 inches long.

Show with your hands about how long
12 inches are.

A 12 inch ruler is a foot ruler.

12 inches = 1 foot.

Count the inches on a foot ruler.

2×3 inches = ? inches.

3 inches and 3 inches are ? inches.

6 inches take away 3 inches leaves ?.



Nickels, Dimes, and Pennies

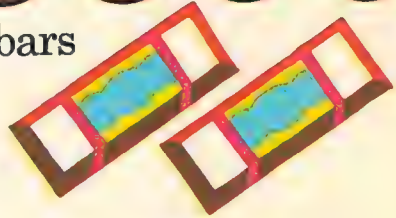
This is a nickel. Do you know
what you can buy for a nickel?
You can buy 5 sticks of candy
that cost 1 penny each. Why?
A nickel is as much money as ?
pennies.



Count the pennies.



Can you buy two 5 cent candy bars
for a nickel? Can you buy
2 candy bars for 2 nickels?



This is a dime.

A dime is as much money
as 2 nickels.



Could you buy the candy bars
with a dime?
with 2 nickels?
with 10 pennies? Why?



Do You Know These?

1 ? ? 4 5 ? 7 ?
5 6 ? ? 9 10 ? 12

Which is more?

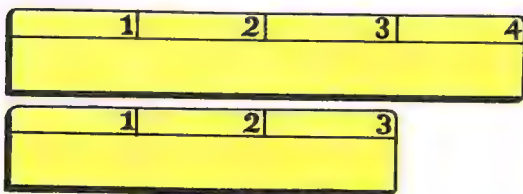
Which is less?

6 or 3	7 or 8	1 or 4	8 or 11
10 or 12	3 or 11	6 or 10	7 or 9
5 or 4		12 or 5	

Tell the number stories.

1	4	9	7	5	8	6	3
<u>+ 8</u>	<u>- 3</u>	<u>+ 1</u>	<u>- 1</u>	<u>+ 1</u>	<u>- 7</u>	<u>+ 1</u>	<u>- 2</u>

How long is it?

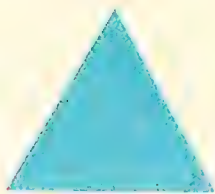


What time is it?



How much money?





Shapes You Know

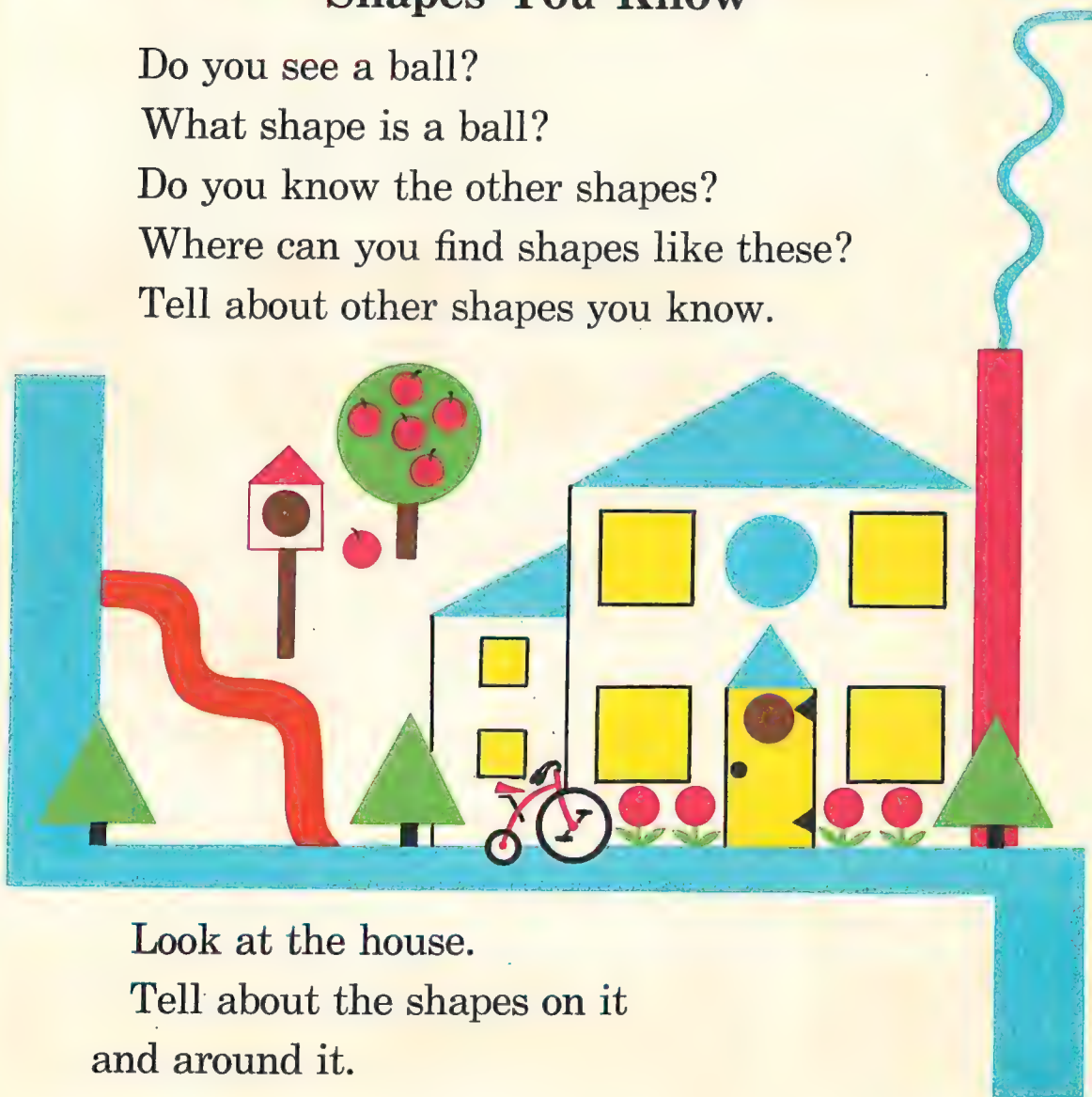
Do you see a ball?

What shape is a ball?

Do you know the other shapes?

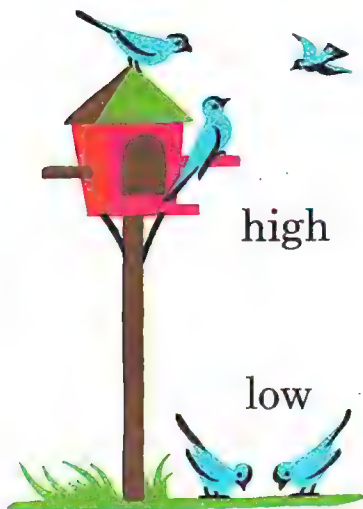
Where can you find shapes like these?

Tell about other shapes you know.



Look at the house.

Tell about the shapes on it
and around it.



Let's Do These

$$\begin{array}{r} 4 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

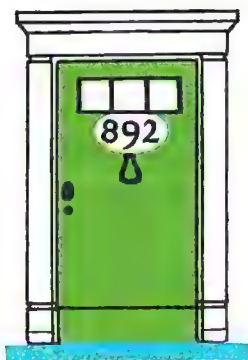
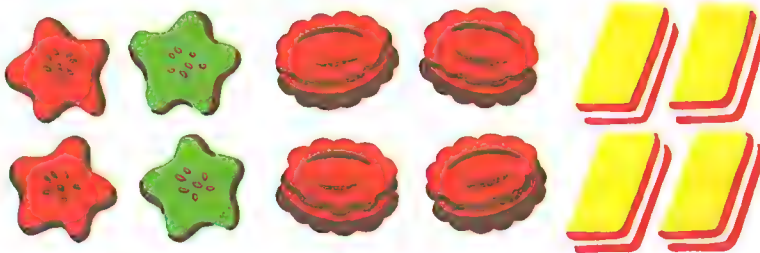
$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

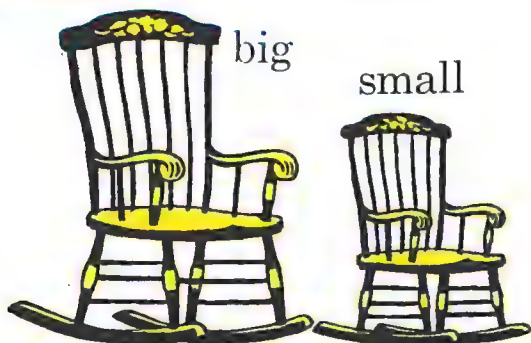
$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

Count
the cookies.



You read the number
367, three-six-seven.
Read the number
on Johnny's door,
on Mary's car.



$7 - 3 = ?$

$5 - 4 = ?$

$9 - 4 = ?$

$8 - 2 = ?$

$6 + 1 = ?$

$2 - 1 = ?$

$3 - 2 = ?$

$4 - 2 = ?$

Contents

Unit		Page
1	Things We See Around Us	1
	Words That Tell Us About Things	
2	We Go to School	11
	Seeing Little Groups of Things	
3	We Take a Trip	23
	Seeing Little Groups in Big Groups	
4	At the Candy Store	41
	Numbers Tell How Much or How Many	
5	At the Pet Shop.	55
	Number Stories in Two, Three, and Four	
6	Birthday Parties.	71
	Number Stories in Five and Six	
7	Games Are Fun	93
	Number Stories in Seven, Eight, and Nine	
8	A Day at the Park.	125
	We Learn What Counting Is	

The authors believe that the learning and teaching of arithmetic is based on child growth. Through the study of many thousands of children and their problems, they have determined how and what children should learn in order to establish desirable growth patterns. They have found that children's problems can be organized into units of work composed of activities which are in reality areas of development.

It should be noted that there are two headings for each unit in the Contents. The first heading names the social situation which the authors have established for each unit of work. The second heading indicates the associated arithmetical concepts which are developed in the unit.



Allyn and Bacon